ETHNIC-RACIAL SOCIALIZATION, SCHOOL CLIMATE, AND DISCRIMINATION: CONTEXTS OF ETHNIC-RACIAL IDENTITY DEVELOPMENT AMONG BLACK AND LATINX PRE-ADOLESCENT YOUTH

by

KIMBERLY R. OSBORNE

(Under the Direction of Margaret Caughy)

ABSTRACT

Forming a healthy sense of self related to one's racial and ethnic group membership is an essential developmental process. For Black and Latinx youth, ethnic-racial identity development is influenced by a variety of contexts, the most prominent of which is ethnic-racial socialization (ERS) in the family. Experiences outside the home (e.g., at school) become more important to youth identity processes as youth approach adolescence. The studies embedded in this dissertation explored the important processes of caregiver-child dyadic ERS and ethnic-racial identity development in the school context with a multiply imputed, longitudinal sample of Black and Latinx families ($N$ = 353). In the first study, the simultaneous contributions of caregivers and youth to the ERS process were observed and analyzed for heterogenous patterns using latent profile analysis. In the second study, the influence of youth's school experiences on their ethnic-racial identity development across the transition to middle school was tested with a subset of the previous sample ($N$ = 269) for whom school information was available. The main effects of school climate and discrimination and the moderating effects of dyadic ERS and being among the minority versus majority racial/ethnic group at school were tested in a structural equations

modeling framework. Findings of the first study suggested there were five differing patterns of dyadic ERS in this sample: *Low Dyadic Engagement, Parent-Led, Justice Salient Advocates, Child Dominant,* and *Multifaceted Dyadic Engagement*. ERS profiles were distinguishable by the degree to which both caregiver and child engaged in discussions about racial/ethnic bias, provided suggestions, and were warm and affectionate to one another. In the second study, greater perceived discrimination predicted decreased identity affirmation for both Black and Latinx youth. Meanwhile, positive school climates were associated with increased identity affirmation for Latinx youth who were not in the majority at their school. In contrast, being in the majority exacerbated the negative effects of discrimination on identity development for Latinx youth. Several effects of youth's school experiences were influenced by the style of ERS they engaged in with caregivers. In light of these findings, instances in which changes by schools versus changes in ERS may benefit youth identity development more are discussed.

INDEX WORDS: Ethnic-racial socialization; Ethnic-racial identity; Black and Latinx families; School climate; Discrimination; Observational measurement

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DEDICATION

"If I have seen further, it is by standing on the shoulders of giants."

- Sir Isaac Newton

*From Newton's personal correspondence with Robert Hooke, 1675*

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# CHAPTER 1

# 1. INTRODUCTION AND OVERVIEW OF STUDIES

## Introduction

Youth's defining of what their racial, ethnic, and cultural heritage means to them is an essential developmental process engaged in across the life course (C. O. Smith et al., 2009). For Black and Latinx youth, a strong sense of self related to their ethnicity and race is associated with a range of positive outcomes including better self-esteem, mental health, and academic achievement (Davis et al., 2017; McGill et al., 2012; Rivas-Drake, 2011; E. P. Smith et al., 1999; Yu et al., 2021). Hereafter, the term ethnic-racial identity will refer to the degree to which youth identify with and feel a sense of belonging to any number of racial and ethnic reference groups (C. O. Smith et al., 2009). The most recognized source influencing the development of youths' understanding of race, ethnicity, and ethnic-racial identity is a process known as ethnic-racial socialization (ERS). However, youth also learn about the ways race and ethnicity operate in society through personal experiences in environments like school (Aldana & Byrd, 2015). The two manuscripts embedded in this dissertation explore these two important processes functioning in the lives of Black and Latinx youth; that is, ERS in the family and the development of ethnic-racial identity in the context of school. In the first manuscript, I explore an oft overlooked component of ERS, which is the simultaneous contributions of caregivers and children to ERS conversations. In the second manuscript, I assess the influence of youths' experiences in and perspectives of school on their ethnic-racial identity development across the transition to middle school. Additionally in the second manuscript, I consider how youth's processing of a school-

based discriminatory dilemma with caregivers may alter the effects of the school environment on youths' ethnic-racial identity development.

**Research on ERS and the Theory of Racial Socialization in Action**

Our understanding of ethnically and racially socializing messages and behaviors has benefited from more than five decades of research on the topic, including early ethnographies and experiments by Kenneth and Mamie Clark (1939), Marie Ferguson Peters' (1981; 1985), Sheree Marshall (1995) and more. Since the inception of this field of research, ERS is understood to be both a promotive and protective influence in the lives of youth of color (Umaña-Taylor & Hill, 2020). Hughes and Chen (1999) were the first to establish a theory of ERS, specifically, the Theory of Parental Racial-Ethnic Socialization. In so doing, Hughes and Chen (1999) put forth several tenets regarding how ERS is enacted: 1) ERS occurs through both verbal and nonverbal behaviors; 2) ERS results from both planned and spontaneous dialogues about race, ethnicity, or real-life events; and 3) ERS can be initiated by either parent or child. However, much of the empirical literature since has focused on the frequency of salient ERS message types, namely cultural heritage and pride socialization, awareness of racial/ethnic barriers and preparation for discrimination, egalitarianism, promotion of mistrust of outgroup members, and color-blindness or silence about race (Hughes et al., 2006). Further, the research on ERS message frequency is dominated by retrospective reports by caregivers and their adolescent-aged children (Smith-Bynum et al., 2016).

Building on the theoretical work of Hughes and Chen (1999) and the rich foundation of literature on ERS, Mia Smith-Bynum established the *Theory of Racial Socialization in Action* (TRSA; Bynum, 2008; Smith-Bynum & Usher, 2004). The TRSA asserts that ERS is a social learning process in that youth develop beliefs and values regarding their ethnicity and race

through collaborative dialogues with individuals who hold more knowledge on these topics (e.g., parents; Vygotsky, 1978). The second assertion is that parents' judgement of when and how to deploy ERS is variable and influenced by their empathic and perspective-taking skills. Therefore, in the tradition of Vygotsky (1978), parents' skills in identifying the child's *zone of proximal development,* or the distance between what the child already knows and the understanding they could achieve with assistance from caregivers, are critical to the child's receipt and use of ERS. In addition to these aspects of parenting, characteristics of the child, such as age and temperament, will influence how they receive and incorporate ERS into their belief systems. Finally, the TRSA contends that the *goodness-of-fit* (Belsky, 1984; Darling & Steinberg, 1993) between parents' ERS strategies, the characteristics of the child, and the parents' social learning techniques will be predictive of child developmental outcomes. While the quality of dyadic ERS conversations is important to explore alone, research guided by the TRSA has the potential to better identify the mechanisms within the ERS process that most benefit youth.

**Middle School Transitions, School Climate, and Ethnic-Racial Identity**

Past research suggests that ethnic-racial identity development escalates in adolescence (French et al., 2006; Phinney & Chavira, 1992), yet youth begin discussing their heritage and processing what it means to them long before they reach adolescence (Aboud, 1988; Quintana & Vera, 1999; C. O. Smith et al., 2009). The middle school period, in particular, is proposed to be a formative period in the development of ethnic-racial identity because it coincides with several significant developmental changes associated with the onset of adolescence (e.g., increases in deductive reasoning, understanding of self, and autonomy; Harter, 1986; Lerner & Steinberg, 2009). Changes in the racial/ethnic composition of schools, peer relations, and academic expectations accompanying this transition are also hypothesized to increase the rate of ethnic-

racial identity development at this stage (Eccles et al., 2006; French et al., 2006; Tatum, 2017). Therefore, the transition to middle school is an important period within which to investigate potential change in the exploration and affirmation of ethnic-racial identity (Tatum, 2017).

Schools socialize children both implicitly and explicitly about race and ethnicity through a variety of mechanisms, including how cultures are represented in the school halls and in the curriculum, how discrimination is managed by administrators and staff, and the fairness of rules perceived by students (Aldana & Byrd, 2015; Durand, 2020). These are all factors of school climate, which can further be defined as the beliefs, values, and norms displayed by administrators, teachers, and students in the school that are perceived by youth (Thapa et al., 2013). For Black and Latinx youth, aspects of school climate can, either idiosyncratically or working in concert, promote the exploration of and commitment to ethnic-racial identity. For example, cultural socialization in schools (i.e., the socialization of familial and communal culture by educators) was associated with greater exploration and commitment to ethnic-racial identity in one sample of middle schoolers (Del Toro & Wang, 2020). (Brown & Chu, 2012; Parris et al., 2018; Seaton & Yip, 2009; L. V. Smith et al., 2020).

The contexts, institutions, and ecological factors Black and Latinx youth interact with daily have been affected by centuries of racial and ethnic discrimination and segregation (Massey et al., 2009). Embedded in these contexts, development for Black and Latinx youth is therefore influenced by these histories (García Coll et al., 1996). Although many aspects of context are out of the control of Black and Latinx families, and therefore not their responsibility to change, it is nevertheless important to examine development in these contexts in order to identify and promote the strengths that exist therein. These are a few of the core tenets of the integrative model for the study of developmental competencies in minoritized children

established by García Coll and colleagues (1996). In the integrative model, family and community responses to the threats associated with racism and segregation are situated within *adaptive cultures*, which are considered to be a combination of culturally embedded practices and protective strategies developed to meet contextual demands (García Coll & Szalacha, 2004). As a central component of adaptive cultures, ERS is frequently tested as a moderator, or protective mechanism, working to counter the effects of interpersonal and institutionalized threats (Perez-Brena et al., 2018). Youth's concepts of their racial and ethnic selves within a socially stratified society may develop as a result of factors within adaptive culture, like ERS, and/or contextual factors, like school climates (Aldana & Byrd, 2015; E. P. Smith et al., 2003; Umaña-Taylor & Hill, 2020).

## Theoretical Framework

This dissertation is guided by the conceptual model displayed in Figure 1.1 and is grounded in several interlocking theories prefaced earlier. Specifically, the theories guiding this dissertation are the Theory of Parental Racial-Ethnic Socialization (Hughes & Chen, 1999), Smith-Bynum's (2016) expansion of this work, the TRSA, and the integrative model for the study of developmental competencies in minoritized children (García Coll et al., 1996; García Coll & Szalacha, 2004). As previously stated, the integrative model acknowledges how one's social position in socially stratified societies, in addition to centuries of racism and segregation, shapes proximal environments for children. Proximal environments for youth are depicted in Box A (e.g., neighborhoods, schools, health care). Social stratification, racism, and segregation are assumed to be present, so you will not see them represented in the figure. Instead, I highlight how the sociopolitical climate—modern-day social and political tensions—additionally impacts access to and resources within children's proximal environments (depicted by unidirectional

arrows in Box A). To the right of this system, in Box B, are the socializing agents a child interacts with; that is, individuals or contexts that relay information to the child related to racism, segregation, race, ethnicity, and culture. In keeping with seminal racism-related stress theories, this box would signify sources through which the child may be exposed to stress related to oppression of their racial or ethnic group(s) (Harrell, 2000; Peters & Massey, 1983). For example, a child may be exposed to stressors directly by experiencing discrimination from peers or adults at school, or indirectly through caregivers' experiences of racism at work (Espinoza et al., 2016; Osborne et al., 2021; Seaton & Yip, 2009). Depending on the quality of the child's proximal environments, these are also the agents through which the child may experience the benefits of adaptive cultures, such as school cultural socialization or familial ERS (Del Toro & Wang, 2020; Perez-Brena et al., 2018).

**ERS as a Moderating Process**

Although typically understood and measured as unidirectional (i.e., caregiver-directed), research and theory suggest that ERS is a bidirectional process that occurs between caregivers and children (Hughes & Chen, 1999; Smith-Bynum et al., 2016). To help guide the understanding of ERS as a process, I enlist the aid of the TRSA (Box C, at the center of the model). Central to this theory is the quality and content of the communication itself. The content of ERS conversations may include socialization of culture and pride, preparation for discrimination, agency in navigating institutions, or the caregiver's desire to advocate on behalf of the child. The caregiver's emotional supportiveness of the child's ideas, including warmth and sensitivity, are also important to the quality of the communication. Though often considered alongside measures of ERS, warmth and sensitivity are rarely measured within ERS dialogues themselves (Dotterer & James, 2018; Dunbar et al., 2015; Frabutt et al., 2002). The emotional

tone of the conversation from each participant (e.g., warmth versus hostility) may determine whether and how the child receives suggestions from caregivers, and it may alter the caregiver's willingness to engage in similar ERS communications with the child in the future. Encircling these elements of content and process is the concept of goodness-of-fit described earlier, such that the fit between caregivers' ERS strategies and the needs of the child help determine the influence of ERS on child developmental outcomes (Smith-Bynum et al., 2016).

A single-headed arrow connects agents of socialization to the ERS process in the conceptual model. Although this dissertation focuses on caregivers as youths' partners in the ERS process, peers and other individuals in the child's life can also be examined as partners. It is also understood that schools themselves do not engage in the ERS process as defined by the TRSA, but rather, actors within schools such as teachers, coaches, or mentors do.

**Caregiver Factors Influencing the ERS Process**

Caregivers' own life experiences, including those related to racism, inform ERS processes with children (Box D). It was beyond the scope of this dissertation to address all the caregiver factors external to the ERS process that may affect the course, content, and quality of ERS. However, demographic characteristics of the caregiver are considered in this dissertation, with prior research indicating that families of color with higher income and education provide more ERS to their children (Hughes & Chen, 1997; McHale et al., 2006). Within these families, parents (rather than grandparents and siblings) and mothers especially, are more involved in the ERS process (Thornton et al., 1990; White-Johnson et al., 2010). Furthermore, some prior research has found that Black caregivers report more use of preparation for discrimination than Latinx caregivers on Likert-style measures (Else-Quest & Morse, 2015; Hughes et al., 2009; Rivas-Drake, 2011). Meanwhile, Latinx caregivers and Spanish-speaking Latinx caregivers

especially are found to prioritize socializing their child with an ability to advocate for themselves and navigate institutions independently (i.e., agency; Ayón, 2018; Ayón et al., 2019). Further, past research has indicated that more recent immigration of caregivers, youth, and other family members is associated with more socialization of culture-of-origin traditions and strengths (Ayón et al., 2019; Gonzales-Backen et al., 2017; Umaña-Taylor & Fine, 2004).

**Child Factors Influencing the ERS Process**

There are several characteristics of children external to ERS conversations that may influence its process (i.e., Box E). Again, it was beyond the scope of this dissertation to explore all child factors external to the ERS process that are associated with it. Characteristics that are examined in this dissertation include the child's sex and race/ethnicity. Akin to reports by caregivers, Black youth report receiving more preparation for discrimination from caregivers than do Latinx caregivers (Hughes et al., 2009; Rivas-Drake et al., 2009). Additionally, in both Black and Latinx samples, males are found to receive more socialization preparing them for discrimination than females (Bowman & Howard, 1985; Caughy et al., 2011; Hughes et al., 2009). A single-headed arrow leaving Box E indicates how child factors external to the ERS process may moderate the effects of youth's contextual experiences on their outcomes. For example, research has shown that being among the majority racial/ethnic group at one's school protects against the effects of higher rates of discrimination and negative school climates on ethnic-racial identity, while being in the minority can exacerbate negative effects (Brown & Chu, 2012). In contrast, being in the minority can amplify positive school climates, while being in the majority may mean that positive school climates matter less for identity outcomes, even decreasing exploration (Camacho et al., 2018; Gharaei et al., 2019; Schachner et al., 2016).

## Overview of Studies

This dissertation aims to explore the ERS and ethnic-racial identity development of Black and Latinx pre-adolescent youth as they transition to middle school. While ERS is situated in the family context, I asses ethnic-racial identity development as influenced by the context of youth's schools. Additionally, ERS in the family is examined as protecting against any risks youth's school contexts may pose to their affirmation and exploration of ethnic-racial identity.

### Manuscript 1 Overview

In the first manuscript of this dissertation, I apply the TRSA to observed conversations between pre-adolescent youth and their caregivers. Specifically, in application of the first tenet, I observe dialogues between caregivers and youth as a social learning process as they discuss how to respond to a hypothetical situation involving a racially and ethnically discriminatory statement made by a White school counselor. As articulated by the TRSA, the success of ERS is reliant on the goodness-of-fit between the child's individual needs and the caregiver's ability to adapt to those needs during ERS conversations. However, before assessing this question of fit and the effects it may have, it will first be important to identify what subgroups of dyadic approaches to ERS conversations already exist. To do so, I analyze both caregivers' and youth's contributions to the conversation equally using a person-centered approach. In contrast to variable-centered approaches, person-centered approaches group individuals based on the quality of their interactions rather than testing the effects of one variable on another. Lastly, I assess whether child, caregiver, and dyadic characteristics influence membership in these subgroups before moving on to my next dissertation aim.

**Manuscript 2 Overview**

In the second manuscript of this dissertation, I assess the effects of school climate on changes in youth's exploration and affirmation of ethnic-racial identity from fifth to seventh grade using a structural equations modeling framework. I additionally assess whether being among the majority versus minority racial/ethnic group at school alters the effects of school climate on ethnic-racial identity development. In my final dissertation aim, I address whether the patterns of dyadic ERS identified in the first manuscript serve as a protective/promotive process by attenuating the harmful effects of negative school climates or amplifying the beneficial effects of positive school climates on youth's ethnic-racial identity.

**Specific Aims and Hypotheses**

**Aim 1.1:** To examine discussions between Black and Latinx children and their caregivers about a school-based racial/ethnic dilemma for patterns in their dyadic, bidirectional ERS.

> **Hypothesis 1.1:** I anticipate there will be three or more patterns of ERS: a minimum of one in which both caregiver and child display low overall engagement and warmth, a minimum of one in which both show high engagement and warmth, and a minimum of one in which one family member shows higher engagement than the other. Overall engagement will be determined by the degree to which caregivers and youth provide suggestions and discuss topics related to race and ethnicity, while warmth will be determined by the degree to which they display supportiveness, affection, and respect.

**Aim 1.2:** To assess whether the resulting subgroups differ by the race/ethnicity of the dyad, the language dominance of the caregiver and caregiver nativity (for Latinx caregivers only), the sex of the child, caregivers' education status, and/or the household's ratio of income to needs.

**Hypothesis 1.2:** First, I anticipate that dyads with higher socioeconomic standing (i.e., higher education of the caregiver and a larger ratio of income to needs) will be more likely to be in ERS subgroups where one or both members are highly engaged. Second, I anticipate that Black dyads and caregiver-son dyads will be more likely to be in ERS subgroups that are higher in preparation for discrimination. Third, I hypothesize that Latinx caregivers will be more likely to be in ERS subgroups that are higher in child agency and lower in caregiver advocacy. Finally, I anticipate that Latinx dyads in which caregivers are Spanish-speaking and/or are first-generation immigrants will be more likely to be in ERS subgroups where one or both members are highly engaged.

**Aim 2.1:** To assess the impact of school climate and discrimination on children's development of ethnic-racial identity across the transition to middle school (from fifth grade to seventh grade).

**Hypothesis 2.1:** I anticipate that positive school climates will be associated with increases in exploration and affirmation of ethnic-racial identity, and negative school climates will be associated with the reverse. I further anticipate that discrimination will be associated with increases in exploration but decreases in affirmation.

**Aim 2.2:** To assess whether being among the majority or minority racial/ethnic group in school alters the effects of school climate on ethnic-racial identity exploration and affirmation.

**Hypothesis 2.2:** First, I anticipate that positive school climates will promote ethnic-racial identity development regardless of the effects of being in the minority or being in the majority. Second, I hypothesize that being in the majority will moderate and attenuate the effects of negative school climates and greater discrimination. Finally, I hypothesize that being in the minority will moderate and exacerbate the effects of negative school climates and discrimination on ethnic-racial identity.

**Aim 2.3:** To assess whether patterns of dyadic ERS lessen or exacerbate effects of school climate on ethnic-racial identity development for Black and Latinx youth.

**Hypothesis 2.3:** I anticipate that subgroups of dyadic ERS for which both members remain warm, supportive, and respectful and for which messages preparing youth for discrimination are balanced with those intended to boost self-esteem, are hypothesized to attenuate the negative effects of school climate. In contrast, subgroups for which both the caregiver and child demonstrate little warmth and engagement are anticipated to exacerbate negative effects. Finally, subgroups for which messages alerting youth to the existence of racial/ethnic bias are rated high and warm supportiveness is low are also expected to exacerbate the negative effects of school climate.

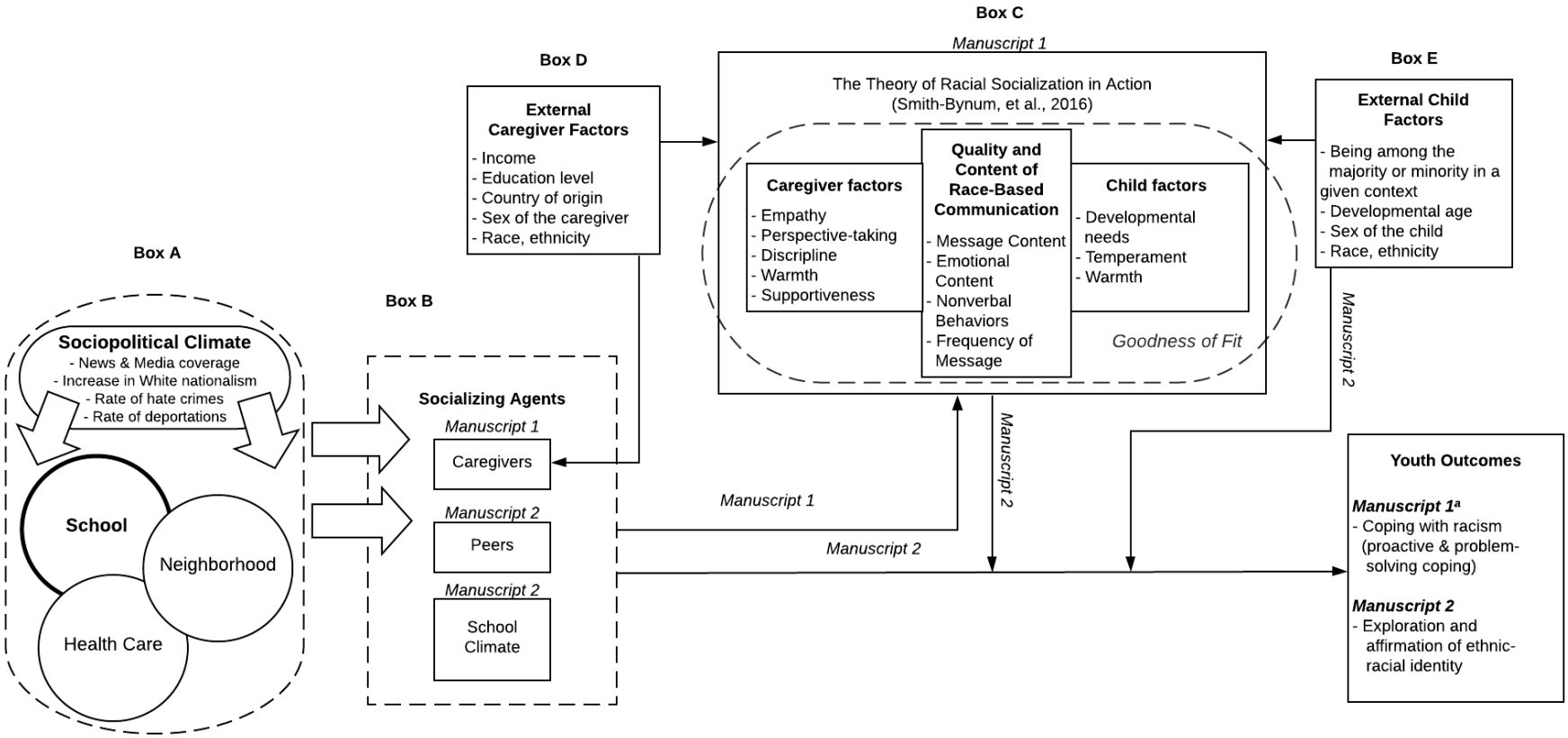


Figure 1.1. *Theoretical Framework*

*Note.* A portion of this figure (Box C) was adapted from Smith-Bynum et al. (2016).
[a] Youths' ability to cope with racism as an outcome of contextual effects, and affected by ERS, is not explicitly tested in Manuscript 1. However, it is suggested as an outcome of ERS by the theories guiding this dissertation.

# CHAPTER 2

# 2. PATTERNS OF OBSERVED DYADIC ETHNIC-RACIAL SOCIALIZATION AMONG BLACK AND LATINX FAMILIES IN RESPONSE TO A HYPOTHETICAL EXPERIENCE OF DISCRIMINATION AT SCHOOL

Osborne & Caughy. To be submitted to *Family Process*

## Abstract

An often-overlooked component of ethnic-racial socialization (ERS) is the dyadic contributions of caregivers and youth to conversations about race, ethnicity, culture, and discrimination. In an application of the *Theory of Racial Socialization in Action*, caregivers and youth in this study were observed as they discussed a hypothetical scenario involving a discriminatory statement made by a White school counselor to a student of color. Video-recorded interactions were rated on ERS content and frequency, as well as the emotional quality of the interaction using an adapted version of the Racial Socialization Observational Task and Coding System. Participants were 353 youth ($M_{age}$= 11.19, *SD* = 0.43; 45.3% female) of Black/African and Latinx descent (47.3% Latinx, 39.7% Black, 13% multiracial) and their primary caregivers (94% mothers) with low socioeconomic standing based in Dallas, Texas. Results of a person-centered analysis suggested that dyads engaged in one of five ERS approaches in response to the hypothetical scenario: *Multifaceted Dyadic Engagement* (37%), *Parent-Led* (18%), *Justice Salient Advocates* (16%), *Child-Dominant* (15%) and *Low Dyadic Engagement* (13%). In addition, ERS profiles were found to differ by the race/ethnicity of youth and caregivers, caregiver education, and caregiver language. The findings presented here regarding patterns of dyadic ERS have important implications for future measurement of ERS and current ERS-based programs.



Key words: Ethnic-racial socialization; parent-child relationship; Black families; Latinx families; observational measurement; latent profile analysis

## Introduction

The socialization of race, ethnicity, and culture plays a crucial role in the development of Black and Latinx youth in the United States (U.S.; Hughes et al., 2006). Known as ethnic-racial socialization (ERS), this bidirectional process (i.e., contributed to by both caregivers and children) unfolds during conversations about hypothetical and lived sociocultural experiences (Smith-Bynum et al., 2016; Umaña-Taylor & Hill, 2020). However, examinations of ERS and its consequences for development have largely focused on message content, self-reported frequency, and the contributions of parents to adolescents (Smith-Bynum et al., 2016; Wang et al., 2020). Such approaches miss the opportunity to investigate how ERS content is conveyed, as well as how youth characteristics and personal experiences contribute to ERS dialogues. Furthermore, the rapid increases in autonomy and search for identity that accompany the adolescent period necessitate a focus on ERS processes prior to adolescence if we are to ensure optimal outcomes for adolescent youth (McGill et al., 2012; Tatum, 2017). The present study observed the ERS conversations of Black and Latinx pre-adolescent youth and their primary caregivers as they discussed how to respond to a hypothetical discriminatory situation involving a White school counselor. Both caregiver and child contributions to the dialogue were examined simultaneously to identify patterns of dyadic ERS. To elucidate the conversational elements that constitute the ERS process in daily life, I turn to Smith-Bynum's (2016) theoretical extension of Hughes and Chen (1999)'s work, the *Theory of Racial Socialization in Action*.

### The Theory of Ethnic-Racial Socialization in Action

In seminal theoretical work on the topic, Hughes and Chen's (1999) Theory of Parental Racial-Ethnic Socialization describes ERS as "a complex, synergistic process" occurring through moment-by-moment interactions between socializing agents—often parents—and children (p.

478). In doing so, Hughes and Chen (1999) identified several components of process. For instance, they noted that ERS conversations can be initiated by either caregiver or child, include multiple ERS dimensions at once, and include intentional, inadvertent, verbal, and nonverbal communication. Smith-Bynum (Bynum, 2008; Smith-Bynum & Usher, 2004) expanded on these insights by proposing that ERS conversations are embedded within the caregiver-child relationship and, therefore, rely upon the quality of the dyad's shared communication, warmth, and sensitivity. Consequently, the *Theory of Racial Socialization in Action* (TRSA; Smith-Bynum et al., 2016) is both an expansion of Hughes and Chen's (1999) model and a combination of ERS and parenting foundations. In establishing the theory, Smith-Bynum set forth five tenets.

Foremost is the assertion that ERS is a social learning process in line with Vygotsky's (1978) sociocultural theory, such that caregivers scaffold children's understandings of race, ethnicity, and culture through collaborative conversations adapted to the child's developmental needs. Second, caregivers vary in their decision-making around when and how to utilize ERS. For example, some may develop an ERS agenda with the goal of promoting beneficial outcomes for their child while others hold beliefs and values about ERS that are rarely enacted (Hughes & Chen, 1999). Third, and closely tied to theories on parenting (Darling & Steinberg, 1993) is the assertion that caregivers' skills in perspective-taking and empathy influence how ERS dialogues proceed via their use of ERS messages and behaviors. The fourth TRSA tenet outlines that youth attributes (e.g., gender, temperament, maturity) influence their receipt, recall, and usage of ERS messages and strategies for coping. The fifth and final tenet asserts that the *goodness-of-fit* between child attributes and a caregiver's intended or inadvertent ERS approach is predictive of child developmental outcomes (Belsky, 1984; Darling & Steinberg, 1993).

Guided by this theoretical framework, several gaps in the literature on ERS become apparent. Principally, the field has lacked sufficient measurement tools to capture the ERS process in real-time and, as a result, our understanding of what the process looks like and its effect on child outcomes is still developing. Given that qualities of the caregiver-child relationship and ERS have largely been examined as separate albeit correlated processes, a gap exists in the empirical testing of ERS as embedded in relationships. Similarly, ERS is rarely examined as a dyadic process. Caregivers and children likely build from each other's comments and suggestions, co-constructing solutions to racial/ethnic dilemmas and, simultaneously, their joint understanding of how race and ethnicity operate in society. Examining all components of ERS at once using observational designs offers one way to address these gaps in the literature.

**Observing Ethnic-Racial Socialization in Action with Dyads**

A wealth of extant literature and two seminal reviews on the topic (Hughes et al., 2006; Lesane-Brown, 2006) have identified four ERS dimensions present across racial and ethnic groups: preparation for bias, egalitarianism, cultural socialization, and promotion of mistrust (Umaña-Taylor & Hill, 2020). Observing ERS in action clarifies the role relational dynamics of the dyad play in the ERS process as well as expands our understanding of how these identified constructs are conducted in real life. For example, through video-recorded observations, Lewis (1999) observed that Black mothers' combing of their daughter's hair was a socialization of cultural knowledge, racial and ethnic pride (dimensions of ERS), and an opportunity for mothers to contribute to their child's self-esteem (a child outcome). The task further conveyed qualities of the mother-daughter relationship to the researchers such as how the dyad managed disagreement, showed verbal and nonverbal sensitivity, and how the interaction reflected their past experiences with hair combing (all elements of process). In another early example, Black mothers who

provided discrimination coping messages with moderate frequency also exhibited more positivity, involvement, and monitoring (relative to mothers doing so with low or high frequency), and their children displayed more warmth and communication (Frabutt et al., 2002). One can garner from these early studies how integral ERS and qualities of the caregiver-child dynamic are to one another and, further, what analyzing the two together can mean for the interpretation of ERS effects for youth. However, while qualities of the relationship were observed during an interaction task in Frabutt et al. (2002), mothers' proactive socialization responses to discrimination were self-reported. Research observing qualities of the caregiver-child relationships simultaneously with ERS has since suggested that supportiveness in the context of coping with discrimination may be distinct from parental supportiveness overall (Dunbar et al., 2022; Lozada & Riley, 2019).

Only a handful of existing measures examine qualities of the dyadic relationship jointly with ERS. These are Johnson's (1996, 2005) Racial Stories Task, Lozada and Riley's (2019) task assessing racialized emotion socialization, and Smith-Bynum et al.'s (2016) Racial Socialization Observation Task and Coding System (RSOTCS). Each of these measures engage caregivers and children in ERS discussions by presenting dyads with hypothetical racial/ethnic dilemmas (e.g., peer discrimination, an encounter with a police officer, discrimination by a White teacher). Findings suggest that caregivers who remain emotionally supportive of their adolescents' solutions for coping with racial discrimination while expanding on adolescents' ideas have children who generate a greater number and broader array of coping suggestions (Johnson, 2005; Smith-Bynum et al., *under review*). Further, in one study, maternal advocacy combined with dyadic warmth and emotional expressiveness in ERS dialogues was found to attenuate the effects of discrimination on youth internalizing and externalizing symptoms by reducing youth's

emotional reactivity to discrimination experiences (Dunbar et al., 2022). This research helps elucidate how collaborative problem solving via ERS contributes to the repertoire of discrimination coping strategies youth utilize as well as the effectiveness of ERS. However, it must be noted that the studies identified thus far have involved solely Black and African American samples. Just one study to this author's knowledge has observed ERS in action with multiple racial/ethnic groups (Aguayo et al., 2021), and findings focused on how the frequency of ERS content expressed verbally differed by race/ethnicity. Observing the process elements of ERS within, rather than across, Latinx samples remains a significant gap in the literature.

**Patterns of Ethnic-Racial Socialization**

Studies using person-centered analyses—an analysis style that organizes participants into subgroups based on shared characteristics—to assess caregiver-provided ERS have identified several consistent patterns in combinations of caregiving behaviors and ERS content. These are: low-engaged or infrequent socialization (Ayón et al., 2019; Cooper et al., 2015; Dunbar et al., 2022; Neblett et al., 2008), unengaged socialization, which includes few positive parenting practices alongside few ERS behaviors (Kim et al., 2019; Metzger et al., 2020; White-Johnson et al., 2010), adaptive/active profiles where preparedness for discrimination is balanced with cultural education (Caughy et al., 2011; Neblett et al., 2008; Smalls, 2010), and multifaceted or integrated socialization where matters of race and ethnicity hold salience in ERS interactions alongside warm and supportive caregiving (Dunbar et al., 2015; Metzger et al., 2020; Neblett et al., 2008; Smalls, 2010). In general, the latter forms of ERS (adaptive/active, multifaceted) and particularly ERS combined with warm supportiveness are associated with better outcomes for youth (Caughy et al., 2011; Dunbar et al., 2022; Metzger et al., 2020).

Research considering both caregivers' and youth's perceptions of the ERS they engage in together is sparse (Christophe et al., 2020; Marshall, 1995). In studies in which both are included, small positive correlations indicate some consistency in parent and child perceptions, although parent- and adolescent-report of cultural education are more strongly related than those of discrimination preparedness (Ford, 2009; Hughes et al., 2009; Peck et al., 2014). Shared cultural experiences may be more memorable to youth than a caregiver's warnings about racial/ethnic barriers. Scholars point to the distinction between barrier warning messages and discrimination preparedness, particularly the beneficial effects of the latter (Dunbar et al., 2022; Lesane-Brown, 2006). While warnings are unidirectional, devising responses to discrimination experiences is a bidirectional process, one that enables youth to think through each stage of how they would respond and anticipate possible responses to their actions. This participation by youth is theorized to benefit their recall and use of strategies in real life (Anderson & Stevenson, 2019; Smith-Bynum et al., 2016). Moreover, a recent study indicated that greater parental warmth was associated with smaller discrepancies between caregivers' and youth's report of ERS (Chen et al., 2021), thus underscoring the importance of studying warmth in addition to the contributions of caregivers and youth.

**Considerations of Gender, Race, Ethnicity, and Socioeconomic Standing**

García Coll and colleagues (1996) identified that group specific economic and political histories, legacies of migration and acculturation, cultural traditions, and current sociopolitical demands create differing developmental contexts (i.e., *adaptive cultures*) for Black and Latinx youth. As a result, patterns of ERS may differ between Black and Latinx dyads. Black caregivers and youth, for example, report more preparation for bias socialization than their Latinx counterparts and may, therefore, express more awareness of racial/ethnic bias (Else-Quest &

Morse, 2015; Hughes et al., 2009; Rivas-Drake, 2011). In Latinx families, preparing youth for discrimination may include warnings of anti-immigrant sentiment and educating youth on how to navigate U.S. institutions independently (Ayón, 2018; Ayón et al., 2019). Such ERS strategies may encourage more agency among Latinx youth, particularly in the school context where Spanish-speaking and immigrant Latinx caregivers feel less comfortable advocating for their children (Tseng, 2006). As a result, ERS subgroups higher in agency and critical consciousness raising and lower in caregiver advocacy may have a greater percentage of Latinx dyads. Differences in language dominance and nativity among Latinx families further diversify ERS approaches. For example, use of Spanish was a form of cultural transmission in Cross et al. (2020) and a defining feature of several ERS patterns in Gonzales-Backen et al. (2017). ERS also differs by immigration patterns in the family, with greater ERS associated with having more family members born outside of the U.S. and caregivers with fewer years in the U.S. (Ayón et al., 2019; Gonzales-Backen et al., 2017; Umaña-Taylor & Fine, 2004).

Demographic correlates with ERS across the two racial/ethnic groups include caregiver and child gender, as well as the household's socioeconomic standing. Mothers more than fathers and caregivers with more education and income are found to engage in more diversified ERS in greater frequency, particularly as youth get older (Hughes et al., 2009; McHale et al., 2006; Thornton et al., 1990). In both Black and Latinx samples, girls are more likely to be socialized as the transmitters of cultural knowledge, while boys report more preparation for discrimination (Bowman & Howard, 1985; Caughy et al., 2011; Hughes et al., 2009). This may be attributable to gender role socialization (Umaña-Taylor & Hill, 2020) and higher rates of discrimination reported by males (Pérez et al., 2008; Seaton et al., 2008). Therefore, subgroups of dyadic ERS

where one or both members endorse greater awareness of racism and provide more coping strategies may have more dyads with sons.

**Current Study**

The current study investigates heterogeneity in ERS approaches during a conversation about a racially and ethnically discriminatory statement made by a White guidance counselor at school. Out of the two scenarios administered to both Black and Latinx families, it was anticipated that the *Counselor* scenario would generate ERS applicable to other school-based discriminatory encounters. In contrast, the *Police* scenario would generate ERS specific to a police encounter and a more general measure of ERS is preferred for this study. Additionally, a person-centered analytic approach is used to classify subgroups of dyads based on the shared qualities of their ERS interactions. A person-centered analytic approach further benefits the aims of this study because it allows the contributions of youth and caregivers to be assessed simultaneously and as equally important to the ERS process. The current study is guided by two research questions. First, do subgroups of dyadic ERS exist when parents and pre-adolescent youth discuss a hypothetical discriminatory experience at school? And if so, how does the ERS content and process differ amongst them? Second, should heterogeneity in dyadic responses to the scenario exist, what demographic characteristics predict membership in the different subgroups? For caregivers, race/ethnicity and education level, as well as nativity and language for Latinx caregivers, are examined. The race/ethnicity and sex of youth and the household's income-to-needs ratio for the dyad are also examined as predictors.

Based on existing ERS literature, I propose the following hypotheses. First, I anticipate there will be three or more subgroups: a minimum of one in which both caregiver and child display low overall engagement and warmth, a minimum of one in which both show high

engagement and warmth, and a minimum of one in which one family member shows higher engagement than the other. Overall engagement is determined by the degree to which caregivers and youth provide suggestions and discuss topics related to race and ethnicity, while warmth is determined by the degree to which they display supportiveness, affection, and respect. Regarding associations between demographic characteristics and the subgroups, I first hypothesize that Latinx dyads will be more represented in subgroups high in agency and low in advocacy, whereas Black dyads will be more represented in subgroups higher in beliefs about racial/ethnic bias (Ayón et al., 2019; Hughes et al., 2009). Second, I anticipate subgroups higher in preparedness for discrimination will have a larger percentage of caregiver-son dyads (Bowman & Howard, 1985). I further anticipate that dyads with higher socioeconomic standing (i.e., higher education, larger household income-to-needs ratios) will be more likely to be in subgroups where, at minimum, the caregiver is highly engaged (Byrd & Ahn, 2020; Dunbar et al., 2022; Thornton et al., 1990). Finally, I hypothesize that Latinx caregivers more likely to be targeted by anti-immigrant sentiment due to Spanish-dominance or having been born outside of the U.S. will be highly engaged in preparing youth for the hypothetical discrimination experience (Ayón et al., 2019; Cross et al., 2020; Romero & Roberts, 1998).

## Method

Data were derived from a subsample of families ($n$ = 81) seen at Wave 6 of the *Dallas Project on Education Pathways* (DPREP), an eight-wave longitudinal study following 407 Black and Latinx families with low socioeconomic statuses from Dallas, Texas. This multilevel, multimethod, and multi-reporter study occurred in two phases. Phase 1 of DPREP began in 2010 and involved four waves of data collection (Waves 1-4) when children were 2½, 3½, in kindergarten, and in first grade. Phase 2 of DPREP began in 2017 and similarly involved four

waves of data collection (Waves 5-8). While Phase 1 measured the effects of children's emergent self-regulation skills on school readiness, Phase 2 assessed the influence of risk and protective factors on children's transitions to middle school from 4th to 7th grade.

## Design

### *Phase 1 Recruitment*

In 2010, purposive sampling strategies were used to recruit 407 Black and/or Latinx families (Black: *n* = 183, 45%; Latinx: *n* = 206, 51%; Afro Latinx: *n* = 18, 4%) with lower socioeconomic standing. Two community liaisons, one with ties to the Black community and one with ties to the Latinx community in Dallas, were employed to direct recruitment efforts. Research assistants distributed study information in English and Spanish to recreation centers, churches, Head Start programs, and WIC clinics. Additionally, some families learned about the study through word-of-mouth. To be eligible for participation, families were required to have a child between 29 and 31 months of age at Wave 1, at least one parent of the target child who self-identified as Black or Latinx, and a household income at or below 200% of the federal poverty level ($22,314 for a family of four in 2010). Families were ineligible if the target child was in foster care, if the child had been hospitalized for more than one week following birth, or if the family planned to move out of the Dallas area in the next year. Demographics of the 407 families are available elsewhere (Caughy et al., 2013).

### *Phase 2 Planned Missingness*

At the beginning of Phase 2 (Waves 5-8) when the majority of study children were in 4th grade, DPREP implemented a planned missing design in collaboration with Dr. Todd Little. Considerable evidence supports the effectiveness of planned missing designs for conserving study resources and managing attrition in multiform, longitudinal studies (Garnier-Villarreal et

al., 2014; Jia et al., 2014; Jorgensen et al., 2014; Rhemtulla et al., 2014; Rhemtulla & Little, 2012). Such designs benefit the researcher by increasing control over the causes of missingness (i.e., missing completely at random [MCAR], missing at random [MAR]), which facilitates more accurate estimation of missing values during the analysis stage. Prior to the launch of Phase 2 data collection in 2017, eligible families were randomly assigned to one of three conditions: receiving a home visit, a phone visit, or not to be interviewed that wave. The home visit condition includes both survey and task assessments of study constructs, while the phone visit condition includes only survey assessments. Beginning in Wave 7 as attrition increased, participants were randomly sampled from the no-visit group to increase the completed sample.

***Data Collection Procedures***

For families receiving phone visits, research assistants administered the parent survey over the phone and sent a link to caregivers' emails for youth to self-administer an online survey beginning when youth were nine and ten years old. If the child had difficulty with the online format, the youth survey was administered over the phone by a research assistant. Families receiving home visits were interviewed in their homes by two research assistants: one trained on the protocol for youth and one trained on the protocol for caregivers. Of note, the individual hired to recruit from the Black community in 2010 was the same person who interviewed Black parents during all eight waves of DPREP (the same was not true for Latinx families). At Wave 6, the home visit procedure included the administration of a parent-child interaction task, an adaptation of the Racial Socialization Observational Task and Coding System (RSOTCS; Smith-Bynum et al., 2016), and a random sample of families from successful phone visits (48%) was offered a short home visit to collect more interaction data.

All data collection procedures were approved by the institutional review boards of all associated universities. Consent for home visits was received in writing, while consent for phone visits was obtained verbally over the phone. All informed consent documents were made available in both English and Spanish. Surveys, assessments, and the interaction task were conducted in particpants' preferred languages. Research assistants who interviewed Spanish-speaking families were fully bilingual. During Wave 6, caregivers received $50 for home visits and $35 for phone visits. Youth received $10 in both instances. Families that completed the parent-child interaction task received an additional $20.

***Sample***

Of the 407 families enrolled in DPREP at Phase 1, 353 (86.7%) families were eligible for follow-up at Phase 2 based on the following inclusion criteria: a) the family had not voluntarily withdrawn from DPREP; b) the family had completed at least two of four data collections visits during Phase 1; and c) the target child had not been diagnosed with a developmental disability. Among the 54 families (13.3%) not contacted for Phase 2, 15 (2.9%) had voluntarily withdrawn, 29 (7.1%) had been lost to attrition after Wave 1, and eight (2.0%) target children had been diagnosed with a developmental disability. Additionally, two children passed away. The families eligible for Phase 2 represent the full sample for which missing estimates were imputed. Families who withdrew or were lost to attrition in Phase 1 did not differ significantly from those who were included in Phase 2 in terms of family poverty or parental education. Relative to Black families, however, Latinx families were more likely to be in the attrition/withdrawn group, 15% versus 8%, $\chi^2$ (1) = 4.06, $p < .05$, and daughters were more likely than sons to be in the attrition/withdrawn group, 14% versus 8%, $\chi^2$ (1) = 4.04, $p < .05$.

Demographic characteristics for the DPREP sample eligible for Phase 2, and the sample

used in this analysis, are displayed in Table 2.1. Youth age ranged from 10 to 12 (*M* = 11.19, *SD* = 0.43) with most in fifth grade (80%) and a majority of primary caregivers were mothers (94%). There were 167 (47.3%) Latinx youth, 140 (39.7%) Black youth, and 46 (13.0%) multiracial/ multiethnic youth. Multiracial/ multiethnic youth were Latinx and White (15, 4.2%), Afro Latinx (14, 4.0%), Black American and White (6, 1.7%), Black and Indigenous American (4, 1.1%), Black American and African (1, 0.3%), Black, Indigenous American, and White (1, 0.3%), Latinx and Indigenous American (1, 0.3%), Black, Latinx, and Indigenous American (1, 0.3%), Black, Latinx, and White (1, 0.3%), Black, Latinx, Indigenous American, and White (1, 0.3%), and one unspecified (1, 0.3%). Sample caregivers were Latinx (178, 50.4%), Black (151, 42.8%), White (7, 2.0%), and multiracial/multiethnic. Multiracial/ multiethnic caregivers were Latinx and White (6, 1.7%), Afro Latinx (4, 1.1%), Black and Indigenous American (3, 0.9%), Latinx and Indigenous American (1, 0.3%), Black American and White (1, 0.3%), Black, Latinx, and Indigenous American (1, 0.3%), and one unspecified (1, 0.3%).

Of the families eligible for Phase 2, 266 (75.4%) were randomly assigned to data collection via the planned missing design at Wave 6, and a total of 156 parents (58.6%) and 150 youth (56.4%) completed data collection. Upon first contact, 14 families (5.3%) were found to have inaccurate contact information. Among families for which we had contact information, completion rates for parents and youth at Wave 6 were 61.9% and 59.5%, respectively. Reasons for non-completion included refusals (*n* = 13, 4.9%) and non-response (*n* = 45, 16.9%). Families who did not complete data collection at Wave 6 did not differ significantly from those who did in terms of child sex, child ethnicity, maternal education, family poverty status, or household income. Eighty-one families (51.3%) from successful visits at Wave 6 (21 phone visits, 60 home visits) participated in the interaction task, and these comprise the observed sample for this

analysis. Demographic characteristics for the observed study sample are displayed in Table 2.2.

## Measures

### *Observed Dyadic Ethnic-Racial Socialization*

The Racial Socialization Observation Task and Coding System (RSOTCS), designed and validated by a Black Clinical Psychologist and Clinical Psychology doctoral students, was developed with three samples ($n$ = 14, 24, 111) of Black parents and their high schoolers from Indiana and Maryland (Smith-Bynum, 2011; Smith-Bynum et al., 2016). I report the race of the developers of the measure to highlight their personal experiences with ERS in Black families as a strength of the measure's design. The task includes three racially discriminatory scenarios, of varying ambiguity, that are read aloud by a research assistant to the parents and adolescents. Dyads are then video recorded as they discuss (for approximately five minutes) what they would do if faced with the same dilemma.

In partnership with Dr. Smith-Bynum, the DPREP research team adapted the RSOTCS for use with the current sample of Black and Latinx fifth graders of two languages. The scenarios used to prompt the discussions were first changed to involve situations 11-year-olds might find themselves in without the caregiver there to assist. Six versions of each scenario were created so that the child in the story matched participating children on gender, race/ethnicity, and language. Research assistants matched to children on these same demographics were audio-recorded reading the scenarios. The hypothetical scenarios were then piloted with a sample of nine Black and Latinx caregivers and their 9- to 11-year-old children (three English-speaking Latinx, three Spanish-speaking Latinx, and three English-speaking Black).

Shortly after Wave 6 data collection began, a team of seven researchers from the developmental sciences (three non-Hispanic White, one Latina, three Black) examined an array

of videos to assess for differences between the conversations of DPREP families and those that participated in the original RSOTCS. New items were added to the codebook to capture features of the ERS process in the DPREP sample that were not seen with Smith-Bynum's adolescent samples (e.g., youth's sense of injustice) and to account for the inclusion of Latinx and Spanish-speaking families (e.g., cultural pride, language use). Several codes from the NICHD Study of Early Child Care and Youth Development capturing features of parenting and dyadic behavior were also added (e.g., scaffolding, affective mutuality; Owen et al., 2000).

Much like the original task, the adapted task (nicknamed the RSOT) includes three vignette scenarios of racially and ethnically prejudiced situations varying in degree of ambiguity. Two of the scenarios (i.e., *Police, Counselor*) were the same for Black and Latinx dyads, while the third scenario (i.e., *Store*) differed by the racial/ethnic stereotypes it evoked. As previously stated, only data from the *Counselor* scenario were used in the current study for the purpose of generating more general ERS, rather than ERS to a police encounter. In the *Counselor* vignette, a student visits the school counselor to ask about being transferred to an advanced science class, and the counselor replies, "Kids like you don't belong in advanced classes." The recording ends by asking dyads how they would handle the situation. For the full text of the scenario see Appendix A. Recordings were played for families on an iPad in their preferred language. Then, research assistants left the room, and dyads were video recorded discussing how they would respond to the situation for five minutes. Twenty-four dyads completed the task in Spanish, 54 completed the task in English, and two conversed in both English and Spanish.

### *Rating and Reliability*

A team of trained research assistants rated each video-recorded, 5-minute discussion using the adapted RSOT rating manual for both verbal and nonverbal behaviors. All items were

rated on a 5-point scale from *Very Low/Not Present* (1) to *Very High* (5). Ratings on the low end of the scale (1 and 2) indicated subtle, infrequent, and unemotional responses, while ratings on the high end (4 and 5) indicated a combination of explicit, implicit, frequent, and emotive responses. All rating items, which comprise the primary variables to be used in this analysis, their definitions, and examples of "High" ratings can be found in Figures 2.1 and 2.2. Caregivers were rated on 12 items ($\alpha = .75$) belonging to two categories: 1) Caregivers' Reactions to the Events and 2) Caregivers' Strategies for Coping with Racial Discrimination. Children were rated on nine items ($\alpha = .77$) belonging to three categories: 1) Child's Reactions to the Events, 2) Child's Strategies for Coping with Racial Discrimination, and 3) Child Affect. Finally, the dyad was rated on their shared affect and felt security for a total of 22 items ($\alpha = .84$).

Approximately 35% of videos per vignette and per ethnicity were rated twice to calculate interrater reliability. When disagreements greater than or equal to two occurred, within-team (by ethnicity) consensus was reached to determine the final score. Estimated accuracies ranged from 74% to 98%, with a median of 90%, across items for raters of Latinx families and from 63% to 100%, also with a median of 90%, for raters of Black families (KappaAcc; Bakeman, 2018). The wider range in accuracies for raters of Black families can be attributed to one item dropping below 70% (child's sense of injustice), as well as too little variation between ratings of a second item (child negative affect). Percent accuracy is reported for child negative affect.

***Demographic Characteristics***

The caregiver characteristics included in this study are race/ethnicity, relationship to the child, education, nativity, and language dominance. Youth characteristics included race/ethnicity and sex. Household income was reported by caregivers at Waves 1-4 (it was not reported at Wave 6). Income-to-needs ratios were calculated at each wave by dividing the family's income

by the federal poverty level for a family of the same size. An average income-to-needs ratio across the four waves income was reported is used as a predictor in this analysis.

## Data Analysis

### *Data Imputation*

Data for the 81 families who participated in the *Counselor* scenario of the RSOT were multiply imputed for the full sample eligble for Phase 2 of DPREP ($n$ = 353). Multiple imputation by chained equations (MICE) was conducted in R-studio using principal components auxiliary imputation via the *PCAux* package (Lang et al., 2015). The DPREP team selected a block of 107 variables across seven waves of the study to be used as auxiliary variables in the imputation process. Variables from each developmental domain at each wave were selected to cover the breadth of contextual and individual influences on dyadic processes. The *PCAux* package produces density plots demonstrating the quality of the imputation for each variable.

### *Analyses for Primary Aims*

All 22 RSOT items were rescaled so that zero represented *Very Low/Not Present* (4 = *Very High*) and examined for univariate normality. Items that occurred in very low frequencies (less than 10% rated above zero) were dropped from the profile analysis. Due to the large number of RSOT items, this step helped to prevent over-parameterization in later analytic stages. Correlations among all RSOT items were also run to assess bivariate relations.

Study hypotheses were tested using a latent profile analysis (LPA) in M*plus* Version 7.4 (Muthén & Muthén, 1998-2017) and included all RSOT items remaining after the univariate stage. Analysis began by testing the null hypothesis that all participants belonged to a single profile. The number of profiles was increased sequentially until the solution best fitting to the data was determined using 100 random sets of starting values and 20 optimizations for each

model. An array of model-fitting classifications was used to assess for the best-fitting solution, including the Bayesian Information Criterion (BIC; Schwartz, 1978), the Sample Size Adjusted BIC (SSABIC; Sclove, 1987), the adjusted Lo-Mendell-Rubin likelihood ratio test (LMR-LRT; Lo et al., 2001), and the entropy statistic (Ramaswamy et al., 1993). Smaller values and greater reductions in values from *k* profiles to *k* +1 profiles are preferred for both the BIC and SSABIC. The adjusted LMR-LRT statistic evaluates the parsimony of the model with *k* profiles compared against the *k* -1 model. A non-significant LMR-LRT statistic ($p < .05$) indicates that the profile solution with one fewer latent profile is preferred. An entropy value of .80 or higher is indicative of high separation between the profiles. Profiles were also assessed for proportional sizes and their alignment with the tenets of the TRSA. For example, the presence or absence of perspective taking and scaffolding by caregivers, youth affectual and temperamental displays, and intended or inadvertent ERS.

Profile membership for all dyads was based on the highest probability estimated for each dyad of belonging to each profile. Naming and describing the profiles was facilitated through mean difference testing of the RSOT items among the profiles. To address the second research question, individual and shared demographics characteristics were tested as predictors of subgroup membership using the R3STEP procedure in M*plus* (Vermunt, 2010).

## Results

### Descriptive Statistics, Correlations, and Data Imputation

Assessments of univariate normality indicated that one child rating item and four parent rating items were significantly skewed toward zero: child's negative affect, and parent's cultural pride reinforcement, egalitarianism, concerns for safety, and respect for authority. These items were not used during the LPA but were included as auxiliary variables during the imputation

process. The remaining 17 items demonstrated strong internal reliability (α = .85). Bivariate associations among study variables were run next (see Table 2.3). The smallest coefficient (*r* = .01) occurred between caregiver suggestions and advocacy, and the largest (*r* = .76) occurred between child's affection toward parent and dyadic warmth.

Next, multiple imputations of missing estimates via principal components auxiliary imputation were conducted in R. A combination of predictive mean matching and logistic regression imputation methods (adaptations to the default MICE methods in the *PCAux* package) were used to produce satisfactory imputations of the remaining 17 RSOT items. Imputations were judged to be satisfactory by the density plots produced by the *PCAux* package, and a final grand mean dataset was created. Density plots are available from the author upon request.

**Characteristics of the Profiles**

One- through six-profile solutions were tested and assessed for model fit (see Table 2.4). The five-profile solution had a lower BIC (Δ-159.90) and SSABIC (Δ-210.66) than the four-profile solution, as well as a higher entropy statistic (.96). Despite having a better fit (entropy = .97; Δ SSABIC = -41.89), the six-profile solution was determined to be less parsimonious given the non-significant LMR-LRT statistic and was thus rejected in favor of the five-profile solution.

Table 2.5 displays the means and standard deviations of the indicators in each profile and the results of the tests of mean differences. Apart from caregiver suggestions, averages across constructs in the first profile were less than two, indicating generally low engagement in the dialogue from both members of the dyad. It was also the only profile with a low rating on dyadic warmth and felt security and child's affection toward parent. For these reasons, the first profile was labeled *Low Dyadic Engagement* (*n* = 46, 13%). The second profile presented as a collectively warm and supportive profile. Caregivers were high in supportiveness and moderate

in concern for child's emotional wellbeing, children were high in affection and respect for parent, and dyads were high (averages above three) in dyadic felt security. In contrast, children were low on every non-emotion item (i.e., racial/ethnic bias affirmation, sense of injustice, identification of stereotypes, egalitarianism, solutions, agency). Caregivers in this profile identified the racial/ethnic bias present in the scenario, although not with great emphasis, and did not elaborate on systemic racism by way of critical consciousness raising. They did, however, provide suggestions and scaffold the child's understanding more so than the previous profile. Thus, the second profile was labeled *Parent-Led* (*n* = 65, 18%).

The third profile was similar to the first in that it had lower scores than the three remaining profiles on all emotion-focused items (i.e., child's affection toward parent, parental supportiveness, concern for child's emotional wellbeing, dyadic warmth/felt security) and teaching items (i.e., scaffolding, critical consciousness raising). However, caregivers in this profile were only statistically higher than the *Low Dyadic Engagement* group in racial/ethnic bias affirmation and had the highest value for advocacy among all of the profiles. Youth in this profile offered more solutions than the *Low Dyadic Engagement* profile and differed from both the *Low* and *Parent-Led* profiles in bias affirmation, child's sense of injustice, and agency. With the dyad's shared alertness to bias and injustice and the caregiver's focus on advocacy, this profile was labeled *Justice Salient Advocates* (*n* = 57, 16%).

In contrast to the *Parent-Led* profile, children in the fourth profile identified the racism and stereotypes present in the vignette more so than their parents and provided more solutions than parents. Paired samples *t*-tests were run for all caregiver-child comparisons in the fourth profile but were not significant. Unlike the youth in the *Parent-Led* profile, parents in the fourth profile were still engaged in the dialogue, but the child's stated beliefs and suggestions were

more frequent and emotionally emphasized than that of caregivers. Also of note, nearly every child who identified egalitarianism in their response to the scenario was present in this profile. Dyads in the fourth profile were warmer than the *Low* and *Justice Salient* profiles, less warm than the second and fifth profiles, but still demonstrated high affective mutuality. Correspondingly, this group was labeled *Child-Dominant* (*n* = 53, 15%).

Dyads in the fifth profile were moderate to high on every indicator of warmth and supportiveness. Parents and children in this profile were equally engaged in coming up with solutions and on the same page about the presence of racism in the vignette, with the highest average scores of any profile on parent and child bias affirmation, parents' identification of stereotypes, critical consciousness raising, and child's sense of injustice. Thus, this profile was given the name *Multifaceted Dyadic Engagement* (*n* = 132, 37%).

**Demographic Differences**

Of the demographic characteristics tested as predictors of profile membership, three caregiver characteristics (level of education, race/ethnicity, and language for Latinx caregivers) and one youth characteristic (race/ethnicity) were significant. As hypothesized, higher caregiver education predicted greater likelihood of being in the *Multifaceted* profile compared to the *Child-Dominant* profile, OR = 1.54, $p = .035$, 95% CI [1.03, 2.29]. Among the Latinx dyads, Spanish-dominant caregivers were nearly three times more likely to be in the *Child-Dominant* profile compared to the *Multifaceted* profile, OR = 2.79, $p = .048$, 95% CI [1.01, 7.71]. Lastly, racial/ethnic differences were found in profile membership. First, Latinx children and caregivers were more likely to be in the *Multifaceted* profile compared to the *Justice Salient* profile, Child: OR = 3.01, $p = .004$, 95% CI [1.41, 6.41], Caregiver: OR = 2.46, $p = .019$, 95% [1.16, 5.22], and to the *Low Engagement* profile, although only moderately so for caregivers, Child: OR = 3.10, *p*

= .021, 95% CI [1.19, 3.69]; Caregiver: OR = 2.35, *p* = .068, 95% CI [0.94, 5.86]. Second, Black children and caregivers were more likely to be in the *Justice Salient Advocates* profile, Child: OR = 2.56, *p* = .013, 95% CI [1.22, 5.39], Caregiver: OR = 2.26, *p* = .030, 95% CI [1.08, 4.74], and marginally more likely to be in the *Low Engagement* profile, Child: OR = 2.05, *p* = .074, 95% CI [0.93, 4.53], Caregiver: OR = 2.11, *p* = .087, 95% CI [0.90, 4.98], when compared to the *Multifaceted* profile. Lastly, non-Hispanic White caregivers were marginally more likely to be in the *Parent-Led* than the *Multifaceted* profile, OR = 5.26, *p* = .064, 95% CI [0.91, 30.63].

## Discussion

To this author's knowledge, just four studies have assessed dyadic ERS processes using structured observational designs; only one included Latinx dyads, and only one established patterns of dyadic interactions (Aguayo et al., 2021; Dunbar et al., 2022; Johnson, 2005; Lewis, 1999). The current study was designed to address these substantial gaps in the literature by identifying subgroups of observed dyadic ERS between primary caregivers and their Black and Latinx fifth graders. Elements of the ERS process (e.g., implicit messaging, facial expressions, emotional emphasis) were captured alongside endorsement and frequency of ERS content using an observational task adapted from Smith-Bynum et al.'s (2016) RSOTCS. Dyads were found to demonstrate one of five patterns of ERS in response to a hypothetical scenario involving a discriminatory statement made by a White school counselor. As hypothesized, one profile each emerged in which both caregiver and child displayed low or high engagement (i.e., *Low Dyadic Engagement*, *Multifaceted Dyadic Engagement*), and two profiles emerged in which one member of the dyad demonstrated more involvement than the other (i.e., *Parent-Led*, *Child-Dominant*). The fifth profile demonstrated an approach not hypothesized by this author (i.e., *Justice Salient Advocates*). Seeking to corroborate past research, the second aim of this study was to assess

demographic and socioeconomic correlates with the five dyadic ERS profiles. Findings indicated differences by the race/ethnicity of caregivers and youth, the education level of caregivers, and the Spanish-dominance of Latinx caregivers. Establishing five patterns of dyadic ERS—embedded in the quality of the caregiver-child relationship—with a sample of Black and Latinx pre-adolescent youth is this study's key contribution to existing ERS literature.

**Profiles of Dyadic ERS**

In line with past research, one profile of *Low Dyadic Engagement* was identified (Ayón et al., 2019; Neblett et al., 2008). Dyads in this group, on average, demonstrated warmth and security between low and moderate levels. Although not lacking warmth entirely, their low emotional expressiveness and attunement (i.e., caregiver supportiveness, youth affection toward caregiver, dyadic warmth) suggested less emotional synergy during the ERS process. Research suggests that youth of caregivers in similarly unengaged or distant profiles are the least likely to experience the benefits of ERS, such as academic achievement, a sense of purpose in life, and the centrality of ethnic-racial identity (Kim et al., 2019; White-Johnson et al., 2010). Therefore, caregivers and youth demonstrating this pattern during ERS conversations may be the most important to reach with ERS interventions (e.g., Stein et al., 2021).

On the other end of the spectrum of engagement, dyads in the *Multifaceted Dyadic Engagement* profile stood apart from the other profiles with ratings at or above moderate on most items. Embedded in a relationship observed to be warm and supportive, caregivers in these dyads used the discussion as a teaching opportunity by scaffolding youths' understanding of the issues at hand (e.g., how the harmful stereotypes present in the scenario might persist today). Youth appeared to benefit from this approach, demonstrating both an awareness of racial/ethnic bias and the confidence to suggest solutions. This aligns with past research similarly indicating the

benefits of ERS for developing youths' repertoire of coping strategies and feelings of efficacy (Anderson & Stevenson, 2019; Johnson, 2005). Caregivers in Stein et al.'s (2021) dyadic ERS-based intervention reported that their ERS conversations benefitted their relationships with their children, including learning more about their child, building trust, and improving their communication skills. Thus, high-quality ERS and a warm and supportive caregiver-child relationship may be reciprocally beneficial. Although outcomes were not tested in this study, this profile most closely matches those profiles in past research associated with more beneficial outcomes for youth (e.g., race salient and multifaceted socializers; Metzger et al., 2020). In contrast and in part due to the lack of ERS literature exploring dyadic processes, very little research has established a *Child-Dominant* approach to ERS, and the potential influence on youth development is unclear. In Johnson (2005), one out of 12 dyadic discussions was led by the child; the child assigned tasks to the caregiver and elaborated on the caregiver's ideas for coping. Although both members of *Child-Dominant* dyads in this study participated in devising solutions, youth were also performing the typical adult roles of elaborating on suggestions and racial/ethnic issues. Future research is needed to understand the presence, qualities, and predictors of *Child-Dominant* ERS patterns.

Second only to the *Multifaceted Dyadic Engagement* profile on most emotion-centered items, dyads in the *Parent-led* profile demonstrated consistent warmth and supportiveness. Youth in these dyads presented as timid—demonstrating low agency and offering few suggestions. Therefore, caregivers may have responded to their temperamental displays by lessening the emphasis on racial/ethnic bias and not elaborating on systemic racism by way of critical consciousness raising. The behaviors of these dyads align closely with several tenants of the TRSA and past research indicating the importance of a caregiver's attunement to their child's

developmental and temperamental needs while collaborating on solutions to a racial dilemma (Dunbar et al., 2015; Osborne et al., *in revision;* Smith-Bynum et al., 2016). Finally, caregivers in the *Justice Salient Advocates* profile of this study were similar to those in the *Parent-led* profile apart from the degree of warmth they expressed during the school-based ERS discussion. Not among the hypothesized dyadic patterns, the defining features of the *Justice Salient Advocates* were caregiver advocacy and the consistency with which both caregivers and youth identified the racial/ethnic bias and injustices of the scenario. Being on the same page in these respects may have negated the need for more instruction on the topic (i.e., critical consciousness raising). Further, finding solutions appeared to take precedence over the emotional elements of the interaction. For youth in Dunbar et al. (2022), a more warm and nurturing approach benefitted girls the most, while a more direct, pragmatic approach benefited boys. Future research might build on the strengths of this analysis and that of Dunbar et al. (2022) by assessing the longitudinal influences of youth temperament and gender on the effectiveness of dyadic ERS in protecting youth mental health against discrimination.

**Demographic Differences in Dyadic ERS Patterns**

In line with past research indicating that caregivers with more education report engaging in ERS more frequently, caregivers with higher education were more likely to be in the *Multifaceted Dyadic Engagement* profile relative to the *Child-Dominant* profile (Thornton et al., 1990). Meanwhile, among the Latinx dyads, having a Spanish-dominant caregiver increased the likelihood of being a *Child-Dominant* dyad. Although caregivers in the *Child-Dominant* profile were engaged in preparing youth for discrimination, youth were found to demonstrate both confidence and competence in responding to discrimination. Youth of Spanish-dominant caregivers often operate as language and cultural brokers for their caregivers when interacting

with English-dominant institutions like school, which aligns with the high agency of youth and low advocacy from caregivers seen in these dyads (Tseng, 2006).

In addition, Latinx dyads were more likely to be in the *Multifaceted Dyadic Engagement* profile, of which caregivers' use of critical consciousness raising and youth's agency were the highest. Meanwhile, in support of my hypothesis, Black dyads were more likely to be in the *Justice Salient Advocates* profile, for whom affirmation of racial/ethnic bias and preparedness for discrimination took precedence over other components of ERS. However, this did not translate to overall engagement in the dialogue, as Black caregivers and youth were moderately more likely to be in the *Low Dyadic Engagement* profile. The higher proportion of Black dyads in the *Justice Salient* subgroup aligns with Dunbar et al.'s (2022) profile of no-nonsense advocates; a profile that was inspired by Brody and Flor's (1998) concept of 'no-nonsense parenting' in Black families. Akin to the no-nonsense advocates, caregivers in the *Justice Salient* profile were straightforward in their responses and demonstrated moderate levels of warmth and expressiveness. Contrasting the no-nonsense advocates, however, caregivers and youth in this group contributed equally to the conversation.

Finally, non-Hispanic White caregivers and their children were marginally more likely to be in the *Parent-Led* profile, in which youth demonstrated less engagement in the dialogue and less awareness of racial/ethnic bias. While the natural back-and-forth of dyads in the *Multifaceted Dyadic Engagement* and *Justice Salient Advocate* groups may represent a comfort and familiarity with discussions of race and ethnicity, the unidirectional nature of the *Parent-Led* approach may represent a lack of familiarity with ERS discussions. Indeed, research on ERS with bi- and multi-racial/ethnic youth indicates that non-Hispanic White caregivers engage the same types of ERS messages as Black and Latinx caregivers but may face less comfort and

efficacy when discussing discrimination specifically (Jackson et al., 2019; Rauktis et al., 2016; Rollins & Hunter, 2013). The number of non-Hispanic White caregivers in this sample was very small, and this finding is by no means generalizable. However, it does contribute additional information to the context within which we consider the *Parent-Led* profile.

**Implications**

The current study adds to the literature on ERS in several ways, the most important of which is the assessment of dyadic ERS embedded in qualities of the caregiver-child relationship. The focus of ERS research has traditionally been on the unidirectional socialization of youth by caregivers. This has created a limited view of real-life ERS interactions, obscuring important variability and diversity in ERS processes. For example, if I were to remove the contributions of youth from consideration in this analysis, the contributions of caregivers in Table 2.5 would appear to increase in a somewhat linear fashion from low through high engagement. Only by assessing youth's contributions is it clear that caregivers in the *Parent-Led* profile were not simply demonstrating a low-moderate approach but responding adaptively to their youth's engagement in the dialogue. Similarly, without considering the contributions of youth, the *Child-Dominant* profile would not have been understood or named as such. Finally, relative to the other profiles, the *Justice Salient Advocates* appear to demonstrate a race-salient perspective with less overall warmth and engagement. By assessing youths' contributions to these dyadic conversation, one can see that the straight-forward, pragmatic approach of caregivers is mirrored in youths' responses. The extent to which this synergy of shared ERS experiences affects developmental outcomes for youth, such as the development of ethnic-racial identity, has yet to be determined. However, this study has established five novel patterns of dyadic ERS in the hopes that future research may replicate, substantiate, and test them.

In addition to the ways this study contributes to the field of ERS, several diversions from extant ERS literature are also worth noting. Specifically, the infrequent endorsement of cultural pride, socialization of respect for authority, and beliefs about egalitarianism (90%, 89%, and 75% rated at zero, respectively). In the hypothetical scenario, the school counselor does not specify what group is meant when she says, "Kids like you." As a result, dyads focused more on the ways the counselor's statement was wrong about the child as an individual and, often, scaffolded youth's understanding that it was a racially/ethnically discriminatory statement. Therefore, group-focused messages like cultural pride or egalitarianism were used with less frequency than items like suggestions and concerns for the child's emotional wellbeing. On the other hand, respect for authority was found to be a defining feature in profiles of caregiver responses to a hypothetical police encounter (Osborne et al., *in revision*) but not deemed as necessary by dyads in response to the school counselor dilemma. This and findings from similar analyses of different discriminatory scenarios (Dunbar et al., 2022; Lozada & Riley, 2019; Smith-Bynum et al., 2016) reinforces the situational variance of ERS messages. This has implications for ERS interventions, given suggested strategies shown to benefit outcomes may be specific to the type and setting of the discrimination experienced (e.g., Anderson & Stevenson, 2019; Stein et al., 2021).

Thanks to the innovative methods used in this study, an LPA model was tested with an imputed sample of 353 from an observed sample of 81. Methods of multiple imputation are becoming more prevalent, are thoroughly tested for their efficacy and efficiency in social science research, and benefit researchers by increasing the statistical power available to test complex developmental phenomena such as that presented in this study (e.g., Enders, 2010; Graham, 2012; Little & Rubin, 2019). Several studies simulating missingness up to 90% have shown that

the proportion of missing data matters less when planned missing designs, predictive mean matching, and longitudinal auxiliary variables are utilized, as was the case in this analysis (Collins et al., 2001; Graham et al., 2006; Madley-Dowd et al., 2019; van Ginkel et al., 2020). These studies also articulate the pros and cons of large-scale multiple imputation so that readers may form their own opinions regarding the legitimacy of these methods. I submit this research for the critical review of my peers in the scientific community in the hopes that this analysis and findings will be replicated.

**Limitations and Future Directions**

The current study makes several important contributions to the field of ERS through its use of observed ERS, the inclusion of Black and Latinx families with fifth grade children, and the focus on dyadic ERS patterns. With such ambitious aims, it was beyond the scope of the current study to test predictors and outcomes of the dyadic ERS patterns. Future research might explore dyadic predictors such as past experiences with discrimination and ethnic-racial identity exploration as well as neighborhood, school, and sociopolitical factors (Caughy et al., 2011; Cross et al., 2020; Osborne et al., 2021). Limitations to generalizability exist due to the focused recruitment of families with low socioeconomic standing. As a result, findings should not be generalized to Black and Latinx families across the economic spectrum. Similarly, because a majority of the Latinx families in the sample (95%) were of Mexican-origin, we were unable to test whether patterns of dyadic ERS differed by ethnicity for Latinx families. It is our hope that future research will expand on this analysis of observed, dyadic ERS to examine differences within the Latinx population by country- and culture-of-origin, residency status, and the generation of immigration of additional family members (e.g., Umaña-Taylor & Yazedjian, 2006). Similarly, all the Black caregivers and youth in this study were born in the U.S., with a

majority having been in the U.S. for several generations, and as a result, these findings do not generalize to all Black and African American samples.

## Conclusion

In this study, Black and Latinx pre-adolescents and their primary caregivers were observed as they discussed a hypothetical situation involving a discriminatory school counselor. Caregivers and youth in the sample were found to display heterogeneity in the ways they approached the ERS conversation. By identifying five distinct patterns of dyadic ERS, this study reinforces the importance of considering both members' contributions during ERS interactions. Although more research is needed to assess the outcomes of these differing approaches and how replicable they are, ERS-based interventions should consider what it means for one member to dominate the dialogue rather than both members contributing equally, as well as the roles dyadic warmth and security play in the process and success of ERS.

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**Table 2.1**

*Characteristics of the DPREP Sample Eligible for Phase 2 (N = 353)*

| Demographic Characteristic | *n* (%) |
|---|---|
| Child's race/ethnicity | |
| Latinx | 167 (47.3) |
| Black | 140 (39.7) |
| Multiracial/ multiethnic | 46 (13.0) |
| Child sex | |
| Male | 193 (54.7) |
| Female | 160 (45.3) |
| Caregiver's race/ethnicity | |
| Latinx | 178 (50.4) |
| Black | 151 (42.8) |
| White | 7 (2.0) |
| Multiracial/ multiethnic | 17 (4.8) |
| Caregiver's relationship to child | |
| Mother | 333 (94.3) |
| Grandmother | 8 (2.3) |
| Father | 11 (3.1) |
| Aunt or Uncle | 1 (0.3) |
| Family federal poverty level | |
| ≤ 50% federal poverty level | 89 (25.2) |
| 51-99% federal poverty level | 147 (41.6) |
| >100-149% federal poverty level | 114 (32.3) |
| Caregiver's level of education | |
| 8 years or less | 36 (10.2) |
| 9-12 years, no diploma | 70 (19.8) |
| High school/GED | 138 (39.1) |
| More than high school | 109 (30.9) |
| *Latinx families only* | |
| Language discussions occurred in | |
| English | 11 (5.9) |
| Spanish | 112 (60.2) |
| Both | 63 (33.9) |
| Nativity (caregiver) | |
| U.S. born | 205 (58.7) |
| Foreign born | 144 (41.3) |

**Table 2.2**

*Characteristics of the Wave 6 RSOT Sample (n = 81)*

| Demographic characteristic | Caregiver's race/ethnicity | | |
|---|---|---|---|
| | Non-Hispanic Black (*n* = 45) | Latinx (*n* = 36) | |
| | *n* (%) | *n* (%) | $\chi^2$ |
| Child's race/ethnicity | | | |
| Black | 38 (84.4) | 0 (0.0) | 66.83*** |
| Latinx | 0 (0.0) | 29 (80.6) | |
| Multiracial/ multiethnic | 7 (16.6) | 7 (19.4) | |
| Child sex | | | |
| Male | 21 (46.6) | 22 (61.1) | 1.68 |
| Female | 24 (53.3) | 14 (38.9) | |
| Child's grade in school | | | |
| Fourth | 2 (4.4) | 1 (2.8) | 5.41** |
| Fifth | 39 (86.7) | 25 (69.4) | |
| Sixth | 3 (6.7) | 9 (25.0) | |
| Caregiver's relationship to child | | | |
| Mother | 37 (82.2) | 34 (94.4) | 5.72 |
| Grandmother | 4 (8.9) | 0 (0.0) | |
| Father | 4 (8.9) | 1 (2.8) | |
| Aunt or Uncle | 0 (0.0) | 1 (2.8) | |
| Family income | | | |
| < 50% federal poverty level | 4 (8.9) | 16 (45.7) | 19.04*** |
| 50-99% federal poverty level | 26 (57.8) | 7 (20.0) | |
| 100-149% federal poverty level | 12 (26.6) | 8 (22.9) | |
| 150%+ federal poverty level | 3 (6.7) | 4 (11.4) | |
| Caregiver's level of education | | | |
| 8 years or less | 0 (0.0) | 11 (30.6) | 23.10*** |
| 9-12 years, no diploma | 5 (11.4) | 9 (25.0) | |
| High school/GED | 15 (34.1) | 6 (16.7) | |
| More than high school | 24 (53.3) | 8 (22.2) | |
| *Latinx families only* | | | |
| Language discussions occurred in | | | |
| English | | 10 (27.8) | |
| Spanish | | 24 (66.7) | |
| Both | | 2 (5.5) | |
| Nativity (caregiver) | | | |
| U.S. born | | 11 (30.6) | |
| Foreign born | | 25 (69.4) | |

*$p < .05$; **$p < .01$; ***$p < .001$.

**Table 2.3**

*Intercorrelations and Descriptive Statistics of RSOT Items*

| Rating Items | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Caregiver | | | | | | | | | |
| 1. Beliefs about r/e bias | — | | | | | | | | |
| 2. Scaffolding | .38** | — | | | | | | | |
| 3. Critical consciousness raising | .52** | .53** | — | | | | | | |
| 4. Rejects stereotypes | .33** | .42** | .51** | — | | | | | |
| 5. Suggestions | .22 | .50** | .45** | .26* | — | | | | |
| 6. Supportiveness | .26* | .55** | .42** | .34** | .30** | — | | | |
| 7. Advocacy | .25* | -.10 | .22 | .08 | .00 | .03 | — | | |
| 8. Emotional wellbeing | .22 | .38** | .49** | .37** | .31** | .50** | .09 | — | |
| Dyadic | | | | | | | | | |
| 9. Affective mutuality | .28* | .37** | .35** | .32** | .25* | .57** | .17 | .48** | — |
| Child | | | | | | | | | |
| 10. Beliefs about r/e bias | .45** | .26* | .08 | .17 | .01 | .18 | .06 | .05 | .30** |
| 11. Sense of injustice | .36** | .34** | .17 | .10 | .22* | .28* | .04 | .19 | .34** |
| 12. Rejects stereotypes | .09 | .15 | .18 | .35** | .10 | .11 | -.19 | .17 | .09 |
| 13. Egalitarianism | .03 | .22* | .16 | .10 | .11 | .24* | -.16 | .33** | .18 |
| 14. Solutions | .08 | .11 | .10 | .20 | .14 | .36** | .07 | .19 | .30** |
| 15. Respectful of caregiver | .09 | .28* | .24* | .33** | .21 | .49** | .18 | .50** | .62** |
| 16. Affection toward caregiver | .22* | .24* | .21 | .24* | .21 | .49** | .225* | .51** | .76** |
| 17. Agency | .19 | .14 | .10 | .22 | .09 | .30** | .07 | .12 | .45** |
| Mean | 2.59 | 2.75 | 1.58 | .86 | 2.38 | 2.88 | 1.65 | 1.68 | 3.05 |
| SD | 1.49 | 1.26 | 1.33 | 1.20 | 1.27 | 1.03 | 1.53 | 1.44 | 0.92 |
| Skewness | 0.64 | 0.52 | 0.26 | 1.24 | 0.42 | 0.52 | 0.33 | 0.35 | 0.59 |
| Kurtosis | 1.03 | 1.04 | 1.05 | 0.48 | 0.77 | 0.57 | 1.37 | 1.24 | 0.60 |
| Minimum - Maximum | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 1-4 |

*Note.* r/e = Racial/ethnic. Skewness and kurtosis are reported as absolute values.

* $p < .05$, ** $p < .01$

**Table 2.3** ***Continued.***

*Intercorrelations and Descriptive Statistics of RSOT Items*

| Rating Items | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|
| Caregiver | | | | | | | | |
| 1. Beliefs about r/e bias | | | | | | | | |
| 2. Scaffolding | | | | | | | | |
| 3. Critical consciousness raising | | | | | | | | |
| 4. Rejects stereotypes | | | | | | | | |
| 5. Suggestions | | | | | | | | |
| 6. Supportiveness | | | | | | | | |
| 7. Advocacy | | | | | | | | |
| 8. Emotional wellbeing | | | | | | | | |
| Dyadic | | | | | | | | |
| 9. Affective mutuality | | | | | | | | |
| Child | | | | | | | | |
| 10. Beliefs about r/e bias | — | | | | | | | |
| 11. Sense of injustice | .70** | — | | | | | | |
| 12. Rejects stereotypes | .35** | .28* | — | | | | | |
| 13. Egalitarianism | .23* | .27* | .34** | — | | | | |
| 14. Solutions | .24* | .38** | .28** | .26* | — | | | |
| 15. Respectful of caregiver | .10 | .25* | .07 | .18 | .38** | — | | |
| 16. Affection toward caregiver | .26* | .36** | .11 | .17 | .38** | .72** | — | |
| 17. Agency | .46** | .512** | .38** | .23* | .74** | .39** | .55** | — |
| Mean | 2.40 | 2.85 | 0.62 | 0.46 | 2.30 | 2.84 | 2.88 | 2.51 |
| SD | 1.67 | 1.29 | 1.12 | 0.91 | 1.12 | 0.98 | 1.01 | 1.08 |
| Skewness | 0.42 | -0.77 | 1.89 | 1.92 | 0.06 | 0.48 | 0.51 | .016 |
| Kurtosis | 1.53 | 0.72 | 2.61 | 2.34 | 0.91 | 0.37 | 0.49 | 0.76 |
| Minimum - Maximum | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 | 0-4 |

*Note.* r/e = Racial/ethnic. Skewness and kurtosis are reported as absolute values.

* $p < .05$, ** $p < .01$

**Table 2.4**

*Fit Statistics for Latent Profile Analysis*

| Fit Statistics | 2 Profiles | 3 Profiles | 4 Profiles | 5 Profiles | 6 Profiles |
|---|---|---|---|---|---|
| BIC | 18320.59 | 17713.54 | 17548.65 | 17388.75 | 17400.78 |
| SSABIC | 18155.623 | 17491.47 | 17275.82 | 17065.16 | 17023.27 |
| Entropy | .909 | .954 | .942 | .958 | .965 |
| LMR-LRT *p*-value | $p < .001$ | $p = .37$ | $p < .001$ | $p = .008$ | $p = .48$ |
| Group size (%) | | | | | |
| Profile 1 | 128 (36%) | 110 (31%) | 95 (27%) | 46 (13%) | 44 (12%) |
| Profile 2 | 225 (64%) | 190 (54%) | 66 (18%) | 57 (16%) | 57 (16%) |
| Profile 3 | | 53 (15%) | 139 (39%) | 65 (18%) | 65 (18%) |
| Profile 4 | | | 53 (15%) | 53 (15%) | 53 (15%) |
| Profile 5 | | | | 132 (37%) | 124 (35%) |
| Profile 6 | | | | | 10 (2.8%) |

*Note*. BIC = Bayesian information criterion; SSABIC = sample sized adjusted Bayesian information criterion; LMR-LRT = Lo-Mendell-Rubin likelihood ratio test. Smaller BIC and SSABIC statistics are preferred, entropy statistics closer to one indicate better class separation, and a significant LMR-LRT statistic indicates that *k* class solution is a better fit than *k*-1 class solution.

**Table 2.5** *Results of Analysis of Variance Tests for Ethnic-Racial Socialization Constructs by Profile*

| Constructs | P1: Low engaged (46, 13%) | P2: Parent-led (65, 18%) | P3: Justice Salient (57, 16%) | P4: Child dominant (53, 15%) | P5: Multi-faceted (132, 37%) | Mean difference |
|---|---|---|---|---|---|---|
| Caregiver Ratings | *M* (*SD*) | *M* (*SD*) | *M* (*SD*) | *M* (*SD*) | *M* (*SD*) | |
| Beliefs about r/e bias | 1.50 (1.60) | 2.03 (1.65) | 2.75 (1.40) | 2.87 (1.59) | 3.49 (1.09) | P3, P4, P5 > P1*; P4, P5 > P2*; P5 > P3* |
| Scaffolding | 1.96 (1.13) | 3.02 (1.20) | 2.23 (1.40) | 3.11 (1.17) | 3.45 (0.94) | P2, P4, P5 > P1*, P3* |
| Critical consciousness raising | 1.13 (1.28) | 1.80 (1.16) | 1.44 (1.20) | 1.92 (1.19) | 2.13 (1.22) | P2, P4, P5 > P1*; P5 > P3* |
| Rejection of stereotypes | 0.74 (1.14) | 0.91 (1.11) | 0.53 (0.89) | 1.06 (1.31) | 1.42 (1.27) | P5 > P1*, P3* |
| Suggestions | 2.17 (1.37) | 2.45 (1.36) | 2.30 (1.22) | 2.38 (1.33) | 2.70 (1.16) | *ns* |
| Supportiveness | 1.85 (0.82) | 3.40 (0.72) | 1.95 (0.93) | 3.34 (0.85) | 3.55 (0.65) | P2, P4, P5 > P1*, P3* |
| Advocacy | 1.33 (1.46) | 1.95 (1.49) | 2.37 (1.57) | 1.53 (1.46) | 1.99 (1.58) | P3 > P1*, P4* |
| Concern for child's | 0.59 (0.80) | 2.28 (1.43) | 0.37 (0.70) | 2.64 (1.40) | 2.33 (1.40) | P2, P4, P5 > P3*, P1* |
| Dyadic Rating | | | | | | |
| Warmth and felt security | 1.93 (0.77) | 3.52 (0.66) | 2.32 (0.76) | 3.17 (0.83) | 3.64 (0.54) | P2, P4, P5 > P3*, P1*; P5 > P4* |
| Child Ratings | | | | | | |
| Beliefs about r/e bias | 0.61 (1.08) | 0.69 (1.01) | 2.93 (1.35) | 2.91 (1.33) | 3.11 (1.12) | P3, P4, P5 > P1*, P2* |
| Sense of injustice | 0.93 (0.74) | 1.28 (0.67) | 3.46 (0.71) | 3.55 (0.93) | 3.58 (0.67) | P3, P4, P5 > P1*, P2* |
| Rejection of stereotypes | 0.28 (0.89) | 0.29 (0.72) | 0.65 (1.11) | 1.32 (1.41) | 0.57 (0.98) | P4 > P1*, P2*, P3*, P5* |
| Egalitarianism | 0.00 (0.00) | 0.00 (0.00) | 0.02 (0.13) | 2.09 (0.35) | 0.03 (0.17) | P4 > P1*, P2*, P3*, P5* |
| Solutions | 1.22 (0.70) | 1.66 (1.08) | 2.18 (1.04) | 2.77 (1.15) | 2.67 (1.03) | P3, P4, P5 > P1*; P4, P5, > P2 |
| Respect for caregiver's suggestions | 1.98 (0.80) | 3.37 (0.70) | 2.00 (0.78) | 3.13 (0.74) | 3.39 (0.63) | P2, P4, P5 > P1*, P3* |
| Affection toward caregiver | 1.78 (0.70) | 3.42 (0.70) | 2.09 (0.69) | 3.09 (0.88) | 3.59 (0.57) | P2, P4, P5 > P1*, P3*; P5 >P4* |
| Agency | 1.54 (0.72) | 1.92 (0.85) | 2.47 (0.78) | 2.83 (0.96) | 3.22 (0.72) | P3, P4, P5 > P1*, P2*; P5 > P3*, P4* |

*Note.* r/e = racial/ethnic; * $p < .05$

**Figure 2.1**

*Caregiver RSOT Rating Items with Examples of "High" Ratings (Osborne et al.,* under review*)*

| Ethnic-Racial Socialization Constructs Rated for Caregivers from the Adapted RSOT | | |
|---|---|---|
| **Construct** | **Definition** | **Example** |
| **Reactions to the Events** | | |
| Beliefs about the existence of racial/ethnic bias | Appraisal and affirmation about the existence of racial/ethnic bias. | *You know she's racist, right? The counselor is racist, meaning does not like people of other races.* |
| Parent scaffolding | Stepwise statements and questions meant to lead the child to an increased understanding of the situation. | *What do you think she meant by 'kids like you?' Would you be offended by that?* |
| Critical consciousness raising | Statements made in attempt to help child recognize oppression and/or ways to take action and resist. | *They're used to the way it used to be a long time ago, but it was wrong then and it's wrong now.* |
| Rejection of stereotypes about racial/ethnic group | Statements made both identifying and rejecting a stereotype about the racial/ethnic group. | *She's tryna say that your race isn't a smart one, but our race has a lot of intelligent people.* |
| Cultural pride | Statements made about the value of the racial/ethnic group. | *Our English isn't the best, but we speak two languages which is better than speaking just one.* |
| Beliefs about egalitarianism | Statements suggesting that all racial/ethnic groups are created equally. | *All races are created equal. That means everybody deserves the same opportunities.* |
| **Parent's Strategies for Coping with Vignette Scenario** | | |
| Parent's suggestions/ directions | Statements made to help child respond to and cope with racist encounters. | *Say to her, "I have just as much right to be in this class as any other child." Then tell me.* |
| Parent is supportive of child's ideas | Statements made encouraging child's own ideas. | *You're absolutely right. I'm with you on that one.* |
| Parent as advocate for child | Statements made regarding strategies caregivers would employ on behalf of their child. | *I would go to the principal or the superintendent and talk to them about it.* |
| Addresses respect for authority | Statements directing or implying respect for authority as important for responding to the scenario. | *Even though what she said was wrong, you still need to remain calm and remain respectful.* |
| Addresses and promotes issues of physical safety | Statements reflecting concern for physical safety and/or to help the child protect themselves. | *Would you feel safe with that lady? I know I wouldn't.* |
| Addresses issues of emotional or mental wellbeing | Statements made reflecting concern for emotional well-being and/or attempting to protect against any emotional harm that could be caused by the scenario. | *What could that mean for the student? It could really hurt her self-esteem. You know you have the right to go as far as your mind will take you, right?* |

**Figure 2.2**

*Definitions of RSOT Rating Items for the Dyad and Youth with Examples of "High" Ratings*

| Ethnic-Racial Socialization Constructs Rated for Youth from the Adapted RSOT | | |
|---|---|---|
| **Construct** | **Definition** | **Example** |
| **Dyadic Code** | | |
| Felt security/ affect mutuality | Emotional intimacy, warmth, and security are shared between the dyad. | *The dyad sat side-by-side holding hands throughout the interaction.* |
| **Child's Reaction to the Events** | | |
| Beliefs about the existence of racial/ethnic bias | Appraisal and affirmation about the existence of racial/ethnic bias. | *[child reiterates what happened in the scenario] and now I know why kids don't like her because she* is *racist.* |
| Beliefs about the existence of injustice | A sense of injustice or unfairness related to the scenario is expressed. | *I think it's unfair because she deserved to be in that class and why isn't she [the counselor] letting her?* |
| Rejection of stereotypes about racial/ethnic group | Statements made both identifying and rejecting a stereotype about the racial/ethnic group. | *Because it [race/ethnicity] doesn't take away from being smart.* |
| Beliefs about egalitarianism | Statements suggesting that all racial/ethnic groups are created equally. | *I don't deserve to be told that because we are all the same.* |
| **Child's Strategies for Coping with Racial/Ethnic Discrimination** | | |
| Child's solutions for coping with the situation | Solutions for how to cope with the situation, regardless the quality or plausibility of the solutions. | *Show her what I did, show her what I can do, and get a teacher to tell her.* |
| Child is respectful of parent's suggestions or directions | Respect displayed through verbal and nonverbal behavior or agreeing with and building on parent's suggestions. | *I'm not sure. What would you do? […] Yes ma'am. I would leave and call you.* |
| **Child's Affect** | | |
| Child's affection toward parent | The initiation, maintenance, and evocation of positive expressions with the parent throughout the interaction. | *Then you'd probably call up there and do your thing [dyad laughs together]* |
| Child's agency | Speaks and acts deliberately, with confidence and eagerness to engage. | *Yes! Yes! I know what I'd do. [proceeds to provide several suggestions]* |
| Negative affect – Externalizing* | Degree of externalizing negative affect displayed during the interaction. | *Arms were crossed throughout the interaction and responded to mother's prompts with one-word statements.* |

*Note*. *Negative affect - Externalizing is reverse coded.

# CHAPTER 3

# 3. SCHOOL EXPERIENCES, DYADIC ETHNIC-RACIAL SOCIALIZATION, AND ETHNIC-RACIAL IDENTITY DEVELOPMENT ACROSS THE TRANSITION TO MIDDLE SCHOOL

Osborne & Caughy. To be submitted to *Journal of Youth and Adolescence*

## Abstract

Black and Latinx youth's experiences at school are important to their developing ethnic-racial identities. For example, experiences of discrimination are found to harm affirmation but increase exploration of identity, and positive perceptions of the beliefs, values, and norms in the school (i.e., school climate) can benefit both exploration and affirmation. However, youths' majority/minority status in the school and the ethnic-racial socialization (ERS) they engage in with caregivers may alter how school experiences affect identity development. This study tests the effects of school experiences and ERS on ethnic-racial identity development in a sample of 112 Black and 145 Latinx youth ($M_{age}$= 11.24, $SD$ = 0.32; 43.9% female) and their primary caregivers (92% mothers) with low socioeconomic standing living in Dallas, Texas. Results indicated that greater perceived discrimination was associated with decreased affirmation for both Black ($R^2$ = .02) and Latinx youth ($R^2$ = .07) and with decreased exploration for Latinx youth only ($R^2$ = .02). Additionally, youths' majority/minority status in the school moderated the effect of school climate for Latinx youth only, such that being in the majority exacerbated the negative effects of discrimination on affirmation ($R^2$ = .15), and not being in the majority amplified the effects of positive school climates on affirmation ($R^2$ = .12). Finally, several ERS approaches were found to amplify the beneficial effects of positive school climates, while other approaches were associated with less exploration and affirmation of ethnic-racial identity. These findings have important implications for programs promoting ERS in school and familial contexts or seeking to assist youths' development of ethnic-racial identity.



Key words: School climate; ethnic-racial identity; Black families; Latinx families; ethnic-racial socialization

## Introduction

Positive school climates promote healthy development for youth across a range of domains, including the development of ethnic-racial identity (Brown & Chu, 2012; Wang & Degol, 2016). However, students of color report feeling less safe and experiencing less positive school climates overall than their White peers (Bradshaw et al., 2010; Koth et al., 2008; McNeely et al., 2002; Parris et al., 2018). For example, Black and Latinx youth report frequent experiences of discrimination by peers and adults in the school halls (C. B. Fisher et al., 2000; Seaton et al., 2008). For youth of color attending schools that fall short of a positive school climate, ethnic-racial socialization (ERS) within the family—or the process of teaching youth about their race, ethnicity, and culture—may buffer against these harms (Banerjee et al., 2018). However, very little research has explored the effects of school climate on the development of ethnic-racial identity. As a result, questions remain regarding whether a stronger sense of group membership functions as a form of protection in response to hostile environments, results from environments that value diverse youth, or both. The current study tests these questions in a sample of Latinx (predominantly of Mexican origin) and Black youth during a pivotal point in their development: the transition to middle school. How youth process a hypothetical discriminatory situation at school during discussions with their caregviers is examined as a factor protecting against the harms of negative school climates. Additionally, whether youth are among the minority or majority racial/ethnic group at their school is assessed as altering the way school climate factors affect youth's exploration of, and commitment to, their ethnic-racial identities.

Scholars have long debated the use of ethnicity and race in describing the experiences of Black and Latinx youth (Helms, 1990; Quintana, 2007). Ethnicity refers to cultural, ancestral, and national heritage, while ethnic identity refers to one's sense of connection to this heritage.

Race is a social construct that categorizes people based on their physical appearance (e.g., skin color) with broad within-group variation; racial identity refers to feelings of group membership related to these factors. In this article, the term ethnic-racial is used to recognize these two equally influential, albeit not interchangeable, facets of identity.

**Theoretical Framework**

This analysis is guided by two foundational theories important to the experiences of Black and Latinx youth: the Phenomenological Variant of Ecological Systems Theory (PVEST; Spencer et al., 1997) and García Coll and colleagues' (1996) integrative model for the study of developmental competencies in minoritized children. The integrative model identifies that outcomes for youth are influenced by how they are socially positioned (e.g., race, ethnicity, social class, gender) and the experiences and environments youth encounter as a result of this social positioning. Similarly, PVEST posits that experiences tied to identity work in concert with contextual factors to influence outcomes. The distinction between the two is the focal point of investigation and intervention. While the phenomenological approach centers the individual's perspective of events and experiences as an essential process affecting later outcomes, the integrative model concentrates attention on the contexts that shape youth development.

In this analysis, factors of school climate are tested as predictors of youth outcomes, specifically ethnic-racial identity exploration and commitment. Negative school climates are theorized to diminish positive feelings towards one's ethnic-racial identity for minoritized youth by increasing their perceptions of barriers to success and decreasing their motivation to engage in school (Ogbu & Simons, 1998; Spencer et al., 2003; Steele & Aronson, 1995). As suggested by Spencer (1995), how youth cognitively process experiences at school likely influences the role these experiences play in their identity development. By observing ERS discussions between

caregivers and youth about a hypothetical discriminatory situation at school, this study aims to assess the influence of youth's meaning-making processes regarding discrimination, with the assistance of caregivers, as altering the effects of school climate on their ethnic-racial identity development.

**Ethnic-Racial Identity and Ethnic-Racial Socialization**

Theorized to be an essential component of identity, more positive beliefs and values associated with one's ethnic and racial heritage are associated with stronger feelings of self-esteem, academic achievement, and psychological well-being—making it an important outcome to assess in the development of Black and Latinx youth (Bravo et al., 2014; Phinney & Chavira, 1992; E. P. Smith et al., 2003). The transition to middle school coincides with a number of developmental changes associated with the onset of adolescence, including increases in cognitive skills, understanding of self, and autonomy (Harter, 1986; Lerner & Steinberg, 2009). These same developmental changes are shown to boost the exploration and affirming of one's ethnic-racial identity (Aboud, 1988). Therefore, the transition to middle school is an important period within which to examine developmental changes in ethnic-racial identity among Black and Latinx youth (Else-Quest & Morse, 2015; McGill et al., 2012; Wampler et al., 2002).

More parent-provided and familial ERS is associated with greater exploration and affirmation of ethnic-racial identity among Black and Latinx youth (Else-Quest & Morse, 2015; Knight et al., 2011; Murry et al., 2005; Umaña-Taylor & Fine, 2004). Past research suggests that the passing on of cultural information and the socialization of cultural pride may promote ethnic-racial identity development more than other socialization strategies (Davis et al., 2017; Else-Quest & Morse, 2015; Umaña-Taylor & Fine, 2004). Meanwhile, the effects of discrimination warning and coping messages on ethnic-racial identity development is less clear, with research

indicating some positive effects on exploration of identity (Hughes & Johnson, 2001), as well as null (Else-Quest & Morse, 2015; Peck et al., 2014; Williams & Smalls-Glover, 2014) and negative effects on the affirmation of ethnic-racial identity (Davis et al., 2017; Hughes et al., 2009; Stevenson & Arrington, 2009). Balancing these two approaches—the socialization of pride in one's racial/ethnic background and preparedness for racial/ethnic bias—may then be the most beneficial to youth's ethnic-racial identity development. Indeed, such ERS approaches are associated with more pride in, and greater perceived importance of, one's race and ethnicity (Hughes & Johnson, 2001; Murry et al., 2009; Neblett et al., 2009). It stands to reason that similarly balanced approaches may facilitate exploration of and commitment to ethnic-racial identity in response to experiences at school.

**School Climate and Ethnic-Racial Identity**

The attention being paid to school climate—defined as the beliefs, values, and norms perceived by students and shaped by the attitudes and actions of peers and adults at school—and its effects on ethnic-racial identity has grown in recent years (Aldana & Byrd, 2015; Thapa et al., 2013). Thus far, research supports the beneficial effects of positive school climates for exploring and affirming ethnic-racial identity (Camacho et al., 2018; Del Toro & Wang, 2020; Griffin et al., 2020; L. V. Smith et al., 2020). However, what constitutes a positive school climate may differ for youth of color. For example, attending more racially and ethnically diverse schools are thought to benefit students' education, but Black and Latinx students in the U.S. report more discrimination and less positive school climates in these contexts (Brown & Chu, 2012; Parris et al., 2018; Seaton & Yip, 2009). Moreover, how discrimination at school affects pre-adolescent youth's ethnic-racial identity development is unclear. Research suggests it may harm the affirmation of ethnic-racial identity while increasing exploration and identity-based coping, but

these findings are largely based on older adolescent samples (i.e., 15 to 18; Montoro et al., 2021; Pahl & Way, 2006; Zeiders et al., 2019). Similarly, factors of school climate have differing effects on exploration and affirmation of ethnic-racial identity. In one instance of youth attending an ethnically and racially diverse middle school, the school's valuing of diversity was found to relate to both identity exploration and resolution among Black and Latinx youth, but teacher supportiveness was only related to exploration (Camacho et al., 2018). Beyond general race/ethnic composition of the school, being among the minority versus majority racial/ethnic group, specifically, alters the effects of school climate on diverse youths' ethnic-racial identity development (Brown & Chu, 2012; Parris et al., 2018; Schachner et al., 2016).

For example, a multicultural curriculum was linked to ethnic-racial identity affirmation for Turkish and Moroccan students in Dutch classrooms when they were in the minority, but the same was not true when they were in the majority (Gharaei et al., 2019). In the U.S., attending predominantly Latinx schools protected immigrant Latinx children against the highest rates of reported peer discrimination. In fact, when Latinx students were in the majority and peer discrimination was greater, so were their feelings of belonging at school (Brown & Chu, 2012). Regardless of youths' ethnic-racial identity status, teacher discrimination did not affect Latinx immigrant youth attending majority Latinx schools (Brown & Chu, 2012). As suggested by Gharaei et al. (2019), being in the majority may motivate students of color to band together in the face of discrimination, increasing interconnectedness and positive feelings toward their race and ethnicity. Thus, being in the majority may protect youth against negative school climates, whereas being in the minority may amplify the effects of positive school climates (Brown & Chu, 2012; Gharaei et al., 2019). Conversely, experiencing hostile school climates and discrimination when Black and Latinx youth are in the minority at school may influence youth to

distance themselves from their ethnic-racial identity to 'fit in' (Schachner et al., 2016). Youth in the minority with assimilationist and/or discriminatory teachers will likely also have fewer opportunities to explore their identity at school (Brown & Chu, 2012; Camacho et al., 2018).

In summary, so long as school norms are positive, attending a racially and ethnically diverse school—or a school where Black and/or Latinx youth are in the majority—is less likely to be harmful for immigrant youth and students of color (Brown & Chu, 2012; Schachner et al., 2016). Further, positive school norms set by teachers and school administrators can increase ethnic-racial identity development regardless of the racial/ethnic composition of the school (Camacho et al., 2018; Del Toro & Wang, 2020; Parris et al., 2018; L. V. Smith et al., 2020). Lastly, being in the minority and experiencing negative school climates and discrimination may promote more assimilation and less exploration of ethnic-racial identity, whereas being in the majority may promote greater inter-connectedness, affirmation, and belonging when facing negative climates and discrimination (Brown & Chu, 2012; Gharaei et al., 2019).

**Current Study**

The influence of school climate on the development of ethnic-racial identity among Black and Latinx youth has garnered increased empirical attention in recent years with the benefit of strong foundations in the literature on ERS and ethnic-racial identity (García Coll et al., 1996; Spencer, 1995). However, there is limited research examining multifaceted ERS (rather than the effects of specific types of messages) for effects on ethnic-racial identity and even less examining ERS in the family as protecting against school climates (Huguley et al., 2019). Further, to this author's knowledge, a study examining the effects of observed, dyadic ERS on the development of ethnic-racial identity has not been described in the literature. Lastly, the differing effects of school climate and discrimination when youth are in the majority versus

minority at their school remain too complex to provide practicable recommendations. Clarifying these effects will be important for determining how best to promote positive outcomes for Black and Latinx youth in a variety of school contexts.

Consequently, the aims of this study are threefold. First, this study aims to assess the impact of school climate and discrimination on children's development of ethnic-racial identity from fifth grade to seventh grade. It is anticipated that positive school climates will be associated with increases in ethnic-racial identity development. Given prior research with older samples, it is cautiously anticipated that experiences of discrimination will be associated with decreased affirmation and increased exploration. Second, whether youth are in the minority versus majority racial/ethnic group at their school is examined as moderating the effects of school climate and discrimination on ethnic-racial identity development. Specifically, it is anticipated that a) positive school climates will promote ethnic-racial identity development regardless of the effects of being in the minority versus majority; b) being in the majority will attenuate the effects of negative school climates; c) being in the majority will moderate the effects of discrimination such that discrimination experiences will be positively associated with affirmation and negatively associated with exploration; and d) being in the minority will exacerbate any negative effects of discrimination and negative school climates.

Lastly, this study aims to assess whether dyadic patterns of ERS lessen or exacerbate the effects of school climate on ethnic-racial identity development for Black and Latinx youth. Specifically, I anticipate that subgroups of caregiver-youth dyads for which both members show engagement in the dialogue, remain warm and supportive toward one another, and balance preparedness for discrimination with messages to reinforce the child's self-esteem will attenuate the effects of negative school climate and discrimination and amplify positive effects.

Conversely, I anticipate that ERS subgroups for which both the caregiver and child show little engagement in the interaction will exacerbate the negative effects of school climate and discrimination. Finally, subgroups for which alertness to racial/ethnic bias is not balanced with child-affirming messages and warm supportiveness in the dyad will also exacerbate any negative effects. For a conceptual diagram of study hypotheses, see Figure 3.1.

## Method

The sample for the current study includes 269 primary caregivers (92% mothers) and their children originally recruited for the *Dallas Preschool Readiness Project* (DPREP)—now the *Dallas Project on Education Pathways*. DPREP is an eight-wave longitudinal study that occurred in two phases involving four waves of data collection each. During Phase 1 (Waves 1-4), families were visited in their homes when children were 2½, 3½, in kindergarten, and in first grade. During Phase 2 (Waves 5-8), youth's development across the transition to middle school was measured and included data collection visits when youth were in fourth through seventh grade. The current analysis incorporates data collected at Waves 5, 6, and 8.

Beginning in 2010, 407 Black and/or Latinx children (Black: $n$ = 183, 45%; Latinx: $n$ = 206, 51%; Afro Hispanic: $n$ = 18, 4%) and their families with lower socioeconomic standing were recruited in Texas. A detailed description of the original DPREP sample and Phase 1 procedure can be found in Caughy et al. (2013). Two community liaisons, one each with ties to the Latinx or Black communities in Dallas, directed recruitment efforts including the distribution of Spanish- and English-language study materials to churches, Head Start programs, recreation centers, and WIC clinics. Eligible families were living at or below 200% of the federal poverty level ($22,314 for a family of four in 2010), had a child between 29 and 31 months of age, and at least one parent who self-identified as Black or Latinx. Families were ineligible if the child was

in foster care, if the family planned to move out of the Dallas area in the next year, or if the child had been hospitalized for more than a week following birth.

At the beginning of Phase 2 and in collaboration with Dr. Todd Little, DPREP implemented a planned missing design. Research finds planned missing designs to be an effective tool for conserving study resources and statistical power in multiform, longitudinal studies by anticipating attrition and managing the reason behind missingness (i.e., missing at random [MAR]; Garnier-Villarreal et al., 2014; Jia et al., 2014; Jorgensen et al., 2014; Rhemtulla et al., 2014; Rhemtulla & Little, 2012). In accordance with the planned missing design, families were randomly assigned to one of three conditions for each Phase 2 wave: to receive a data collection visit in their home, over the phone, or not to be visited that wave. Developmental constructs were measured using both survey and task assessments during home visits and only survey assessements during phone visits. As attrition increased in Waves 7 and 8, participants in the no-visit condition were randomly assigned to either a home or phone visit to increase the completed sample. Wave 8 involved only phone visits due to the COVID-19 global pandemic.

***Sample***

Of the 407 families enrolled in Phase 1 of DPREP, 353 (86.7%) were eligible for follow-up at Phase 2. The criteria for exclusion from Phase 2 were: a) the target child had been diagnosed with a developmental disability during Phase 1; b) the family had voluntarily withdrawn; and c) the family was lost to attrition after Wave 1. Of the 54 families excluded from Phase 2, eight (2.0%) target children were diagnosed with a developmental disability, 15 (2.9%) families withdrew voluntarily, and 29 (7.1%) were lost to attrition. Additionally, two children passed away. Families who withdrew or were lost to attrition did not differ significantly from those who were included in Phase 2 in terms of caregiver education or family poverty. However,

relative to families of boys and Black American families, families of girls and Latinx families were more likely to have withdrawn or been lost to attrition by Wave 5; 14% girls versus 8% boys, $\chi^2$ (1) = 4.04, $p < .05$, and 15% Latinx versus 8% Black, $\chi^2$ (1) = 4.06, $p < .05$.

Of the families eligible for Phase 2, 255 (72.2%) were randomly assigned to data collection at Wave 5 via the planned missing design and a total of 168 parents (65.9%) and 167 youth (65.5%) completed data collection. Sixty-six (23.2%) families were found to have inaccurate contact information at the first contact attempt. Among families for which we had contact information, the completion rates for parents and youth were 81.2% and 80.7% at Wave 5 and Wave 6, respectively. Families who completed Wave 5 data collection and those for which no contact information was available did not differ in terms of family poverty status, caregiver education, child gender or ethnicity. Further, 17 families (6.7%) refused participation at Wave 5, 22 (8.6%) did not respond when contacted, and three moved to Mexico (1.2%). There were no demographic differences between this group and those who completed data collection at Wave 5.

At Wave 6, 266 (75.4%) families were randomly assigned to data collection via the planned missing design, of which 156 parents (58.6%) and 150 youth (56.4%) completed data collection. After excluding families for which we had no contact information, completion rates for parents and youth were 61.9% and 59.5%, respectively. There were no demographic differences between families who completed Wave 6 data collection and those for whom no contact information was available. Further, 19 families (7.1%) refused participation at Wave 6 and 45 (16.9%) did not respond. Families who participated in Wave 6 did not differ from those who did not in terms of child sex or ethnicity, maternal education, or family poverty status.

At Wave 8, the timepoint at which the outcome variables of interest were collected, those families previously assigned to the no-visit condition were included for data collection to

increase the final sample in light of the global pandemic. Nineteen families (5.4%) who had withdrawn prior to Wave 8 were excluded, resulting in a total of 334 (94.6%) families contacted for data collection. Interviews were completed with 158 parents (47.3%) and 157 youth (47.0%). After excluding those for whom we had no contact information ($n$ = 65, 19.5%), the completion rates for parents and youth were 58.7% and 58.4%, respectively. Families for which no contact data were available did not differ from families who completed Wave 8 data collection in terms of child gender or caregiver education but did differ in terms of family poverty status and child ethnicity. Families with an average income above 100% of the federal poverty level were more likely to be followed up at Wave 8, 80.3% versus 67.3%, $\chi^2$ (1) = 3.99, $p < .05$, as were marginally more families of Latinx children, 75.4% versus 66.4%, $\chi^2$ (1) = 2.25, $p = .09$. Data collection was not completed with 35 families (10.5%) that refused and 46 families (13.8%) that did not respond. There were no demographic differences between the refusal/no response families and those who completed Wave 8 data collection.

The sample for the current study is limited to those for whom we had information on the schools they attended at or before the collection of the predictor variables (Wave 6). If the participant was not seen at Wave 6, ethnic and racial demographic composition data for the child's school at Wave 5 were used, therefore excluding those not seen at Wave 5 or 6. Those excluded did not differ from those included on the basis of child sex, child ethnicity, or family poverty but did differ in terms of caregiver education such that caregivers with a high school degree or more were more likely to be followed up at Wave 5 and/or 6 than those without a high school degree, 79.8% versus 68.6%, $\chi^2$ (1) = 5.12, $p < .05$. At Wave 6, there were 163 (60.6%) cases for which at least one member of each dyad completed the scheduled interview. Information on the child's school was collected during the phone call to schedule the data

collection interview and after the family had consented to participate for another year. However, some families did not respond when they were contacted for their scheduled interview and, thus, there are 33 (12.3%) cases missing on everything but the school data at Wave 6. Further, Wave 5 data were used for 73 (27.1%) youth, resulting in a sample of 269 for the current study.

Descriptive statistics for the study sample are displayed in Table 3.1. Sample youth were primarily Latinx (130, 48.3%) or Black (104, 38.7%), with 35 (13%) identified as multiracial or multiethnic: Black American and Indigenous American (4, 1.5%), Black American and African, (1, 0.4%), Black American and non-Hispanic White (2, 0.7%), Black, Indigenous American, and non-Hispanic White (1, 0.4%), Latinx and non-Hispanic White (14, 5.2%) Afro Latinx (10, 3.7%), Black, Latinx, and Indigenous American (1, 0.4%), Black, Latinx, and non-Hispanic White (1, 0.4%), and Latinx-biracial unspecified (1, 0.4%). In all, 145 (53.9%) youth were of Latinx descent, 112 (41.6%) were of Black/African descent, and 12 (4.5%) were of both Black/African and Latinx descent. At Wave 6, youth age ranged from 10.36 to 12.10 ($M$ = 11.24, $SD$ = .32), and a majority were in fifth grade (81.4%). At Wave 8, youth age ranged from 12.22 to 14.10 ($M$ = 13.22, $SD$ = .34), and 82.7% of youth were in seventh grade. Sample caregivers were primarily mothers (91.8%) with high school degrees or the equivalent (73.2%). Of the multiracial and multiethnic caregivers not specified in Table 3.1, 6 (2.2%) were Latinx and non-Hispanic White, 3 (1.1%) were Afro Latinx, 3 (1.1%) were Black and Indigenous American, 1 (0.4%) was Black, Latinx and Indigenous American, and 1 (0.4%) was Black-biracial unspecified. Among the foreign-born Latinx caregivers (75.8%), most were from Mexico (95.7%) and the remaining five were from El Salvador, Guatemala, and Honduras.

## Procedure

Consent from caregivers and assent from youth were provided in writing at the beginning of a scheduled home visit and verbally for phone visits. All study documents were available in English and Spanish, and data collection visits were conducted in the participants' preferred language. Roughly 40% of families partcipated in Spanish at each Phase 2 wave. Two research assistants, one trained on the interview protocol for caregivers and the other on the protocol for youth, conducted each home visit. The home visit procedure at Wave 6 included an observed measure of ethnic-racial socialization between caregivers and children (Smith-Bynum et al., 2016). Of note, the research assistant completing home visits for the Black families in the sample was the same individual who recruited them in 2010 for all eight waves of the study. For both the home and phone visit procedures, youth interviews were self-administered while caregiver interviews were researcher-administered. In the phone visit condition, a link to an online survey was sent to the caregivers' emails for youth to complete, while youth in the home visit condition self-administered the online survey on a tablet. In both visit formats, research assistants interviewing Spanish-speaking families were bilingual.

All data collection procedures were approved by the institutional review boards of the universities associated with DPREP. Home visit procedures lasted about 1.5 hours, and phone visit procedures lasted about one hour. Caregivers received $50 for home visits and $25-35 for phone visits (depending on the length of the survey that wave), and youth received $10. All visits were completed over the phone at Wave 8 due to the pandemic and reimbursements were increased to $40 for parents and $15 for youth. Families who had completed at least six waves of the study were sent an additional $50 gift card at Wave 8 to thank them for their commitment.

## Measures

### *School Climate*

The student and parent versions of the Delaware School Climate Survey (Bear et al., 2011; Bear et al., 2015) were used at Wave 6 to measure caregivers' (α = .99) and youth's (α = .94) perceptions of school climate. The youth survey includes five subscales, all of which are mirrored on the caregiver version: Teacher-Student Relations (youth α = .91; caregiver α = .87), Student-Student Relations (youth α = .88; caregiver α = .89), Fairness of Rules (youth α = .77; caregiver α = .88), School Safety (youth α = .89; caregiver α = .92), and Liking of School (youth α = .78; caregiver α = .91). The survey for caregivers includes two additional subscales: Teacher-Home Communication (α = .81) and Clarity of Expectations (α = .92). Both versions include a 4-point scale from *Disagree a Lot* (1) to *Agree a Lot* (4). Subscale scores are calculated by taking the mean, with higher scores indicating perceptions of a more positive school climate.

### *School Race/Ethnic Composition*

The race/ethnic composition of students' schools was retrieved from publicly available data on the Texas Education Agency's website (www.tea.texas.gov). Among the children in this analysis, 226 (84%) attended public schools, and 43 (26%) attended charter schools. Following DPREP's original sampling strategies, two binary variables were created for each child, indicating whether they were Black or Latinx. In a study reported by Johnson (2005), schools with populations of more than 75% Black students were considered predominantly Black. After examining frequencies for Black and Latinx youth among the minority or majority at their school, a cut point of 70% was used in an attempt to achieve more equal sample sizes. Latinx youth were coded as being in the minority if the Latinx population at their school was less than

or equal to 30% and among the majority if it was greater than or equal to 70%. The same was done for Black youth.

### *Discrimination Experiences*

The Perceived Discrimination Scale (PDS; Phinney et al., 1998) was used at Wave 6 and includes three items about unfair treatment and four items about feeling unaccepted by society (α = .90). Youth responded on a scale of 1 (*Almost Never*) to 5 (*Very Often*). A mean score is used to represent total perceived discrimination, with higher scores indicating more discrimination.

### *Ethnic-Racial Socialization*

Dyadic ERS was assessed at Wave 6 using a version of the Racial Socialization Observation Task and Coding System (RSOTCS; Smith-Bynum et al., 2016) adapted for the DPREP sample. In the task, dyads listened to an audio-recording of a hypothetical scenario that involved a racially/ethnically discriminatory statement made by a White female school counselor to a child of the same gender, age, and race/ethnicity of the target child. Dyads were then asked to discuss for five minutes what they would do in a similar situation. Interactions were rated on 12 items for caregivers, nine items for youth, and one for the dyad's warmth and security. Estimated accuracies for raters of Latinx families ranged from 74% to 98%, and from 63% to >99% for raters of Black families. The adaptation of the RSOTCS, the rating process, and interrater reliability are described in detail in Osborne et al. (*in revision*). Five subgroups of dyadic ERS were identified using latent profile analysis for the full sample eligible for DPREP Phase 2 ($n$ = 353; described in the first manuscript of this dissertation). The ERS subgroups were: *Low Dyadic Engagement* ($n$ = 36, 13.4%), *Parent-Led*, ($n$ = 44, 16.4%) *Justice Salient Advocates* ($n$ = 47, 14.9%), *Child Dominant* ($n$ = 40, 14.9%), and *Multifaceted Dyadic Engagement* ($n$ = 102, 37.9%).

Dyads in the *Low Engagement* profile demonstrated little dyadic engagement in problem-solving and few visible signs of warmth and affection. Youth in the *Parent-Led* profile were as active as youth in the *Low Engagement* profile. However, they displayed more outward signs of affection toward caregivers, and caregivers were more engaged in teaching than those in the *Low Engaged* profile. Caregivers and youth in the *Justice Salient* profile agreed on all items related to the presence of racial/ethnic stereotyping and discrimination in the hypothetical scenario. Their overall warmth was like that of dyads in the *Low Engagement* profile and, where provided, their solutions for the situation were succinct. Although both members of the dyads in the *Child Dominant* profile were engaged and warm during the dialogue, youths' agentic engagement was particularly notable. Finally, dyads in the *Multifaceted* profile were rated the highest on the most items, including naming racism, scaffolding solutions, and warm supportiveness.

***Ethnic-Racial Identity***

Youth responded to the 14 items of the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) at Waves 6 and 8. The MEIM includes two subscales: ethnic identity search (W6: $\alpha = .75$; W8: $\alpha = .78$) and affirmation, belonging and commitment (W6: $\alpha = .90$; W8: $\alpha = .88$). For brevity in the remainder of this paper, these subscales are referred to as "exploration" and "affirmation," respectively. Responses were captured on a 4-point scale from *Strongly Disagree* (1) to *Strongly Agree* (4). Higher mean scores on the subscales indicate more identity exploration or stronger affirmation. Both subscales of the MEIM demonstrated strong internal reliability among the Black (W6 exploration: $\alpha = .76$; W8 exploration: $\alpha = .84$; W6 affirmation: $\alpha = .92$; W8 affirmation: $\alpha = .89$) and Latinx youth of this sample (W6 exploration: $\alpha = .77$; W8 exploration: $\alpha = .73$; W6 affirmation: $\alpha = .86$; W8 affirmation: $\alpha = .89$). The subscales of the MEIM have demonstrated similarly strong internal reliability in past research with Black youth

(exploration, .60-.74; affirmation, .68-.78) and Latinx youth (exploration, .58-.84; affirmation, .71-.81; Else-Quest & Morse, 2015; Pahl & Way, 2006).

### *Covariates*

Several covariates were included in the analyses: the percent of students at the school receiving free or reduced lunch, the type of school the child attended at Wave 6 (public or charter), primary caregiver's education level, child sex, and the ratio of the family's income to their economic needs. Primary caregivers provided the name and type of school their child attended, and the school's economic information was extracted from the TEA website. Forty-three (16%) youth attended charter schools, and 78.1% attended schools where the majority (≥75%) of students received free or reduced lunch ($M$ = 81.44, $SD$ = 18.45, Min = 7.40, Max = 100). Primary caregivers reported on their education and child sex at Wave 1 and annual household income at Waves 1 through 4 and Waves 7 and 8. An income-to-needs ratio (ITNR) was calculated for each household by dividing the family's household income by the federal poverty level for a family of the same size, and the average of the ITNRs from Waves 1 to 4 and Waves 7 to 8 were included as covariates.

## Analysis Plan

### *Imputation of Missing Data*

Missing data on the MEIM, PDS, and school climate surveys resulting from the planned missing design were multiply imputed for the sample of 269. One hundred and seven variables across seven waves of the DPREP study and from each developmental domain measured by the study were selected by the research team to be included as auxiliary variables in the imputation. The *PCAux* package in R-studio (Lang et al., 2015) was used to extract principal components from this block of auxiliary variables, which are then used to assist the multiple imputation by

chained equations (MICE) of missing data. The quality of the imputation of each variable was assessed by examining the density plots produced by the *PCAux* package.

### *Hypothesis Testing*

Study hypotheses were tested using structural equation modeling (SEM) in M*plus* Version 7.4 (Muthén & Muthén, 1998-2017). A confirmatory factor analysis (CFA) was conducted for youth- and caregiver-report of school climate, with the subscales of each survey representing the latent indicators for the coinciding factor, and measurement invariance of these latent structures across Black and Latinx youth was assessed. Then, a structural model incorporating perceived discrimination, parent- and youth-report of school climate, and the MEIM subscales was assessed for fit with the data. Recommended cutoff values representing acceptable model fit for all indices were used: a non-significant chi-square statistic, RMSEA range maximum < .08, SRMR < .08. CFI > .90, and TLI > .90 (West et al., 2012). Further, following recommendations in the field (Kline, 2015), non-significant covariates were trimmed from models during model testing to improve parsimony.

Next, the moderating influences of being among the minority or being among the majority were tested using multigroup models. Chi-square difference tests were used to assess whether hypothesized pathways were significantly different between groups. Lastly, the manual BCH method was used to test whether the effects of school climate and discrimination on changes in ethnic-racial identity development differed among the ERS profiles. This analysis functions like a multigroup model wherein each pathway is sequentially constrained, and chi-square difference tests are calculated to evaluate whether pathways significantly differ among the five latent ERS profiles.

### *Power*

A power analysis was run in M*plus* using Monte Carlo simulations first for the SEM and then for the multigroup models split by the minority and majority binary variables. Results indicated there was sufficient power to detect effects significant at $p < .01$ and $p < .001$ (indicated by a power estimate close to .80). Additionally, some models were slightly underpowered when detecting effects significant at $p < .05$ and $p < .10$. The latter suggests that effects found to be significant at $p < .05$ and $p < .10$ may have been larger with a larger sample size. An output and a detailed summary are provided in Appendix B.

## Results

Bivariate associations, means, and standard deviations of study variables are displayed in Table 3.2. All study variables demonstrated acceptable skew and kurtosis with estimates less than |2| and |7|, respectively. Perceived discrimination was negatively correlated with four of the five subscales of youth reported school climate, positively correlated with ethnic-racial identity exploration at Wave 6, and negatively correlated with affirmation at Wave 8. Regarding the hypothesized moderators, the dyadic ERS profiles were positively correlated with caregivers' report of school safety and caregivers' satisfaction with school. A quick comparison of means (ANOVA) indicated there were no significant differences between the ERS profiles for either school climate subscale. However, the largest difference was observed between the *Multifaceted* and *Parent-Led* profiles and between the *Multifaceted* and *Justice Salient* profiles in reported school safety and school satisfaction, respectively, with the means for the *Multifaceted* profile being larger in both instances. Interestingly, several statistically significant correlations were observed between caregivers' report of school climate and the racial/ethnic composition of the school, albeit in the opposite direction for the percentage of Black students versus the percentage

of Latinx students. For example, caregivers' report of teacher-student relations and satisfaction with school decreased as the percentage of Black students in the school increased, but caregiver responses to these same subscales grew more positive as the percentage of Latinx students increased. For this reason, correlations among study variables were further examined split by the race/ethnicity of the child. These are available in Appendices C and D.

**Measurement Invariance Testing and Confirmatory Factor Analyses of School Climate**

Measurement invariance of the latent structure of school climate (youth and caregiver report) across Black and Latinx youth was tested using a multigroup method. There were not enough Afro Latinx youth in this sample ($n$ = 12) to examine the measurement model and school climate effects for Afro Latinx youth, specifically, and this group was dropped from the remaining analyses. However, descriptive statistics for all study variables among the Black, Latinx, and Afro Latinx youth of this sample are displayed in Table 3.3. Consequently, measurement invariance testing was conducted for youth of Black/African ($n$ =112) versus Latinx descent ($n$ = 145). The youth report of school climate passed configural but not metric invariance indicating that, while the factor structure was the same for both groups, the factor loadings varied. Partial metric invariance (which entails freeing constrained factor loadings until a solution is achieved) was attempted but unsuccessful due to limits of power. Additionally, the caregiver-report of school climate did not meet requirements for configural invariance. Thus, it was decided that separate models would be run for Black versus Latinx youth.

The CFA of school climate for the Black subsample supported separate latent factors for caregiver and youth report of school climate, although model fit was poor, $\chi^2$ (53) = 243.21, $p$ < .001; RMSEA = .18, 90% CI [.16, .20]; CFI = .86; TLI = .82; SRMR = .06. For the latent factor representing caregivers' perceptions of school climate, modification indices suggested correlated

residuals between school safety and clarity of expectations and between clarity of expectations and teacher-student relations. For the latent factor representing youth's perceptions of school climate, correlated residuals between liking of school and fairness of rules and fairness of rules and teacher-student relations were recommended. Finally, correlated residuals were allowed between caregivers' perceptions of school safety and the youth's perceptions of teacher-student relations. Model fit was improved by these changes, although the RMSEA remained poor, $\chi^2$ (48) = 106.72, $p < .001$; RMSEA = .10, 90% CI [.08, .13]; CFI = .96; TLI = .94; SRMR = .05.

Similarly, the CFA of school climate for Latinx youth supported separate latent factors for caregiver- and youth-report of school climate, although model fit was poor, $\chi^2$ (53) = 275.76, $p < .001$; RMSEA = .17, 90% CI [.15, .19]; CFI = .88; TLI = .85; SRMR = .04. Correlated residuals between latent indictors were added based on modification indices reported in the output. For the latent factor representing caregiver-report of school climate, correlated residuals between school safety and clarity of expectations, clarity of expectations and teacher-student relations, and between fairness of rules and student-student relations were added. For the youth-report latent factor, residuals for the school safety and fairness of rules subscale indicators were allowed to covary. The final set of correlated residuals occurred between caregivers' perceptions of school safety and youth's perceptions of rule fairness, which improved model fit, $\chi^2$ (48) = 105.06, $p < .001$; RMSEA = .09, 90% CI [.07, .11]; CFI = .97; TLI = .96; SRMR = .04.

**Differences in Ethnic-Racial Identity as a Function of School Climate**

***Results for Black Youth***

Next, Wave 8 exploration and affirmation were regressed on perceived discrimination, the latent factors of school climate, and Wave 6 exploration and affirmation for the subsample of Black youth. The subscales of the MEIM at each time point were allowed to covary with each

other, and perceived discrimination covaried with the school climate latent factors. The original model displayed signs of non-ignorable multicollinearity between the latent factors of youth- and caregiver-report of school climate and they were tested separately as a result. Nonsignificant covariates were trimmed, resulting in no covariates in either model. Model fit was good for the model with youth-report of school climate, $\chi^2(23) = 34.49$, $p = .058$; RMSEA = .07, 90% CI [.00, .11]; CFI = .97; TLI = .95; SRMR = .04, and similarly so for the model with caregiver-report of school climate, $\chi^2(42) = 80.18$, $p < .001$; RMSEA = .09, 90% CI [.06, .12]; CFI = .96; TLI = .94; SRMR = .04. Perceived discrimination predicted marginal decreases in affirmation two years later, $\beta = -.16$ ($SE = .10$), $p = .091$, 95% CI [-.30, .02], $R^2 = .02$, in the model for youth report of school climate only. The latent factors representing caregiver- and youth-report of school climate did not predict exploration or affirmation in either model.

***Results for Latinx Youth***

The SEM for the subsample of Latinx youth was tested next. The subscales of the MEIM at each time point were allowed to covary with each other, and perceived discrimination covaried with the school climate latent factors. Nonsignificant covariates were once again trimmed, resulting in no covariates in the model and good model fit, $\chi^2(98) = 170.27$, $p < .001$; RMSEA = .07, 90% CI [.05, .09]; CFI = .96; TLI = .95; SRMR = .04. Perceived discrimination predicted decreased affirmation two years later, $\beta = -.26$ ($SE = .08$), $p = .001$, 95% CI [-.42, -.11], $R^2 = .07$, and marginal decreases in exploration, $\beta = -.16$ ($SE = .09$), $p = .078$, 95% CI [-.31, .02], $R^2 = .02$. The prior time point of exploration predicted more exploration at Wave 8, $\beta = .33$ ($SE = .12$), $p = .005$, 95% CI [.09, .48], $R^2 = .05$, but the same was not true for affirmation. Lastly, the prior timepoint of exploration predicted moderate increases in affirmation, $\beta = .17$ ($SE = .10$), $p =$

.094, 95% CI [-.03, .37], $R^2$ = .02. The latent factors representing caregiver- and youth-report of school climate did not predict exploration or affirmation.

**Moderation by Racial/Ethnic Composition of the School**

***Results for Black Youth***

The effects of being minoritized in the school was tested for the Black youth in the sample using a multigroup model. Models for each identity outcome (exploration and affirmation) were tested separately, and nonsignificant covariates were trimmed. Average household ITNR and attending a charter school were controlled for in the affirmation model. Model fit for the resulting model was acceptable, $\chi^2$ (120) = 153.81, $p$ = .02; RMSEA = .07, 90% CI [.03, .10]; CFI = .96; TLI = .96; SRMR = .09. There were no significant covariates in the exploration model, and model fit was acceptable, $\chi^2$ (198) = 288.32, $p$ < .001; RMSEA = .09, 90% CI [.07, .11]; CFI = .93; TLI = .92; SRMR = .10. The effects of school climate and perceived discrimination on ethnic-racial identity exploration and affirmation did not significantly differ for those Black youth in the minority at their school ($n$ = 45, 40%) compared to those not in the minority at their school ($n$ = 67, 60%).

***Results for Latinx Youth***

There were no significant covariates in the model testing affirmation as the outcome, and model fit was good, $\chi^2$ (206) = 295.52, $p$ < .001; RMSEA = .08, 90% CI [.06, .10]; CFI = .95; TLI = .95; SRMR = .08. The remaining covariates in the model for exploration were the percent of students on free or reduced lunch at the school and the caregiver's level of education. Resulting model fit was good, $\chi^2$ (246) = 326.17, $p$ < .001; RMSEA = .07, 90% CI [.05, .09]; CFI = .96; TLI = .95; SRMR = .08. For Latinx youth among the majority in their school (88, 61%), greater perceived discrimination predicted decreases in affirmation two years later, $\beta$ = -.38 (*SE*

= .10), $p < .001$, 95% CI [-.57, -.20], $R^2 = .15$, $\Delta\chi^2 = 5.89$, $p = .015$. Conversely, for those Latinx youth *not* in the majority (57, 39%), youth report of a more positive school climate predicted increased affirmation two years later, $\beta = .51$ (.19), $p = .006$, 95% CI [.14, .87], $R^2 = .12$, $\Delta\chi^2 = 6.32$, $p = .012$. School climate and perceived discrimination were not significant predictors of exploration. However, for youth not in the majority at their school, having caregivers with more education predicted marginal decreases in exploration, $\beta = -.22$ (*SE* = .13), $p = .086$, 95% CI [-.46, .03], $R^2 = .05$, $\Delta\chi^2 = 4.43$, $p = .035$. Interestingly, the past time point of exploration only predicted more exploration in seventh grade for youth in the majority at their school, $\beta = .31$ (*SE* = .12), $p = .012$, 95% CI [.07, .55], $R^2 = .05$, $\Delta\chi^2 = 3.77$, $p = .05$.

**Moderation by the Latent Profiles of ERS**

***Results for Black youth***

The influence of caregiver-report and youth-report of school climate were tested separately to retain power. With one latent factor of school climate removed from the model, the pattern of results was nearly identical in both models. For brevity, only results for the model assessing caregivers' perceptions of school climate is reported, given that caregiver-report maintained significance in prior models when youth report of school climate was also included. Models were run separately for affirmation and exploration, and nonsignificant covariates were once again trimmed. Attending a charter school was the only covariate that significantly influenced affirmation, and there were no significant covariates in the exploration model.

More positive school climates reported by caregivers predicted decreased affirmation two years later for Black youth in the *Parent-Led* profile, $\beta = -.42$ (*SE* = .12), $p < .001$, 95% CI [-.65, -.18], $R^2 = .18$, and marginal decreases in affirmation for youth in the *Child Dominant* profile, $\beta = -.33$ (*SE* = .18), $p = .067$, 95% CI [-.69, .02], $R^2 = .11$, when compared to youth of *Low*

*Engaged* (vs. *Parent-Led*: $\Delta\chi^2 = 4.99$, $p = .026$; vs. *Child-Dominant*: $\Delta\chi^2 = 3.96$, $p = .048$) and *Multifaceted* dyads (vs. *Parent-Led*: $\Delta\chi^2 = 5.93$, $p = .015$; vs. *Child-Dominant*: $\Delta\chi^2 = 4.79$, $p = .029$). Further, more perceived discrimination predicted decreased affirmation for Black youth in the *Justice Salient* profile, $\beta = -.59$ ($SE = .22$), $p = .007$, 95% CI [-1.02, -0.16], $R^2 = .46$, when compared to youth in the *Parent-Led* profile ($\Delta\chi^2 = 4.04$, $p = .044$).

Conversely, more positive school climates predicted marginal increases in exploration two years later among youth of *Multifaceted* dyads, $\beta = .37$ ($SE = .21$), $p = .077$, 95% CI [-.04, .79], $R^2 = 0.08$, compared to youth in the *Child-Dominant* ($\Delta\chi^2 = 5.41$, $p = .020$) and *Parent-led* profiles ($\Delta\chi^2 = 2.93$, $p = .087$).

***Results for Latinx Youth***

The percentage of students on free or reduced lunch at the school and the caregiver's level of education were the only two significant covariates in the model testing affirmation as the outcome, and there were no significant covariates in the model for exploration.

More positive school climates reported by youth predicted marginal elevations in affirmation two years later for Latinx youth in the *Low Engaged*, $\beta = .56$ ($SE = .18$), $p = .002$, 95% CI [.20, .92], $R^2 = .21$, and *Justice Salient* profiles, $\beta = .42$ ($SE = .11$), $p < .001$, 95% CI [.20, .63], $R^2 = .39$, compared to youth in the *Child Dominant* profile (vs. *Low Engaged*: $\Delta\chi^2 = 3.59$, $p = .058$; vs. *Justice Salient*: $\Delta\chi^2 = 3.66$, $p = .056$). Similarly, greater perceived discrimination predicted decreased affirmation two years later for youth in the *Low Engaged*, $\beta = -.39$ ($SE = .20$), $p = .049$, 95% CI [-0.78, -0.002], $R^2 = .10$, and *Justice Salient* profiles, $\beta = -.56$ ($SE = .11$), $p < .001$, 95% CI [-.78, -.35], $R^2 = .44$, compared to youth in the *Multifaceted* profile (vs. *Low Engaged*: $\Delta\chi^2 = 3.01$, $p = .08$; vs. *Justice Salient*: $\Delta\chi^2 = 4.92$, $p = .026$). Perceived

discrimination also predicted marginal decreases in affirmation for youth in the *Justice Salient* profile compared to the *Child Dominant* profile ($\Delta\chi^2 = 3.04$, $p = .081$).

More positive youth-reported school climates predicted increased exploration for Latinx youth in the *Justice Salient*, $\beta = .41$ (*SE* = .17), $p = .016$, 95% CI [.08, .75], $R^2 = .13$, profile compared to youth from the *Parent-Led* ($\Delta\chi^2 = 3.60$, $p = .058$) and *Child Dominant* profiles ($\Delta\chi^2 = 6.20$, $p = .013$). In contrast, caregivers from the *Justice Salient* profile reporting less positive school climates had children who engaged in increased exploration, $\beta = -.47$ (*SE* = .18), $p = .007$, 95% CI [-.82, -.13], $R^2 = 0.14$, also in comparison to youth from the *Parent-Led* profile ($\Delta\chi^2 = 2.00$, $p = .036$). Further, more positive youth- and caregiver-reported school climate predicted decreased exploration for youth in the *Child Dominant* profile, youth-report: $\beta = .56$ (*SE* = .09), $p < .001$, 95% CI [-.63, -.28], $R^2 = 0.26$; caregiver-report: $\beta = .39$ (*SE* = .12), $p = .002$, 95% CI [-.64, -.15], $R^2 = .24$, compared to those in the *Multifaceted* ($\Delta\chi^2 = 6.20$, $p = .013$) and *Parent-Led* profiles ($\Delta\chi^2 = 3.92$, $p = .048$). Finally, more discrimination predicted decreased exploration for youth in the *Low Engaged* profile, $\beta = -.46$ (*SE* = .11), $p < .001$, 95% CI [-.67, -.25], $R^2 = .06$, when compared to youth in the *Multifaceted* profile.

## Discussion

The current study tested the effects of school climate and perceived discrimination on changes in Black and Latinx youths' exploration and affirmation of their ethnic-racial identities across the transition to middle school. Greater perceived discrimination from students, adults at school, and the broader society had an adverse effect on affirmation two years later for both Black and Latinx youth. However, this effect was attenuated by ERS for all but those Black and Latinx youth in the *Justice Salient* profile and those Latinx youth in the *Low Engaged* profile. Of interest, there were no significant main effects of perceived school climate on Latinx youth's

ethnic-racial identity development until their non-majority status in the school was also considered, at which point positive school climates mattered more for the affirmation of identity. Several significant effects of school climate also emerged when profiles of dyadic ERS were assessed as moderators, though these differed by the race/ethnicity of the child. Specifically, effects were found for the *Multifaceted, Parent-Led*, *Child-Dominant,* and *Justice Salient* dyads of the Black subsample and among the *Low Engaged, Child-Dominant,* and *Justice Salient* dyads of the Latinx subsample. Findings for Black and Latinx youth are discussed separately in the upcoming sections.

## Findings for Black Youth

### *School Climate*

Neither youth- or caregiver-report of school climate had a significant effect on Black youth's exploration or affirmation of their ethnic-racial identities across the transition to middle school. While measures of general school climate were used in this study, past research with Black samples has found the school's socialization of culture and valuing of diversity (referred to as cultural pluralism) to be more related to affirmation of ethnic-racial identity (Del Toro & Wang, 2020; L.V. Smith et al., 2020). In contrast, teacher supportiveness predicted exploration but not affirmation in a sample of Black, Latinx, and White middle school students (Camacho et al., 2018). In this study, caregivers' perceptions of how clear the school rules were, and their perceptions of teacher-student relations shared a degree of variance over and above that which was already captured by the latent factor of caregiver-reported school climate. Similarly, youth report of the fairness of rules also shared additional variance with the teacher-student relations subscale. Therefore, how the Black caregivers and youth in this sample rated the interactions between teachers and students was influenced, in part, by how clearly articulated and fair they

perceived the rules in the school to be. Given the higher rates of suspension and more severe punishments Black students are subjected to compared to their White peers (Gilliam et al., 2016; U.S. Department of Education Office for Civil Rights, 2016), a different definition of teacher supportiveness may be needed in order to identify effects for Black youth. Specifically, one that accounts for the way rules are decided and punishments are managed. Additionally, in this analysis, perceived discrimination in fifth grade was linked to moderately decreased affirmation in grade seven but did not affect exploration. This finding diverges from a prior study indicating that increases in discrimination were followed by increases in exploration from ages 15 to 18 (Pahl & Way, 2006). Given similar initial rates of discrimination reported in both studies, it is unclear whether the older age of Pahl and Way's sample, the fact that discrimination (particularly from adults) increased, or a combination of these factors mattered more for the prediction of exploration. More research is needed to assess the simultaneous effects of cultural pluralism for affirmation and teacher supportiveness for exploration, as well as the longitudinal effects of discrimination on ethnic-racial identity among Black pre-adolescent youth.

Not as hypothesized, being among the minority racial/ethnic group did not alter the effects of school climate or perceived discrimination on Black youth's ethnic-racial identity development. Results of the Monte Carlo simulations assessing power indicated that a sample of Black youth three times the size of this study's sample may have been sufficient to detect a moderate positive effect of caregivers' school climate reports on identity exploration for those *not* in the minority at their school (power equal to .821). As previously stated, the sample for Phase 2 of DPREP was drawn from the original sample recruited to Phase 1 in 2010. Therefore, obtaining a larger sample was beyond this study's scope and, as a result, the findings of this model should be interpreted with caution. Moreover, all other effects found to be non-significant

($p > .10$) in this model, aside from the effects of covariates, remained non-significant following simulated sample size increases. Even with a larger sample size, the effect suggested by the Monte Carlo simulations was not as hypothesized. In contrast, it was anticipated that youth *minoritized* in their schools and experiencing positive school climates would demonstrate increases in their identity exploration and affirmation and, further, that being minoritized would exacerbate the harmful effects of discrimination.

On average, Black youth in this sample attended schools where youth of their same race/ethnicity comprised 42% ($SD = 26.16$) of the student population, and 40% attended schools where the population of Black youth was less than 30%. The finding that Black youth minoritized in their schools did not benefit from positive school climates or experience greater harm from discrimination, though surprising, may be further indication that a different definition of 'positive' school climates is needed to better capture experiences for Black youth (Aldana & Byrd, 2015; Durand, 2020). Additionally, Black youth in this sample demonstrated very little change in their identity exploration and affirmation from fifth to seventh grade (see Table 3.3). These values are comparable to the degree of exploration and affirmation reported by older adolescents in some prior research, although the difference becomes more pronounced as samples get older (Else-Quest & Morse, 2015; French et al., 2006; Pahl & Way, 2006). Therefore, in addition to demonstrating levels of exploration and affirmation matched to that of older samples, the Black youth in this sample demonstrated stability and strength in their identities despite not being in the majority at their schools.

***Dyadic Ethnic-Racial Socialization***

For Black youth, *Multifaceted* dyadic ERS amplified the effects of positive school climates, such that it was associated with increased exploration of ethnic-racial identity two years

later. In contrast, youth experiencing positive school climates who followed their caregiver's lead (*Parent-Led* dyads) or who took the lead (*Child Dominant*) during ERS dialogues showed decreased affirmation two years later. Youth in *Parent-Led* dyads demonstrated less agency and racial/ethnic literacy than their *Multifaceted* peers and were also less likely to attribute the discrimination presented in the scenario to their race or ethnicity. They may not have viewed the ERS they engaged in with caregivers as applicable to them, leading to less affirmation of their ethnic-racial identities. In contrast, the youth in *Child Dominant* dyads demonstrated a significant amount of agency and provided many ideas as to how to address the discrimination present in the hypothetical scenario. However, raters of the dyadic ERS interactions did not rate youth on the feasibility or quality of their solutions. Therefore, caregivers in *Child Dominant* dyads may have missed an opportunity to teach youth about the importance of their racial/ethnic group membership. Youth in *Parent-Led* and *Child Dominant* dyads experiencing positive school climates may not have found it necessary to rely on their racial/ethnic group membership for support, as was the case for Turkish and Moroccan students when they were in the majority in Dutch classrooms (Gharaei et al., 2019). Further, these findings may be a consequence of 'positive' school climates that promote ideals of equality and inclusion rather than valuing and accessing diversity as a resource, such that the former fosters assimilation among racially and ethnically minoritized youth (Schachner et al., 2016).

Finally, youth in the *Justice Salient* ERS profile, who demonstrated greater attunement to social justice, were more affected by inequity and injustice in their environments (i.e., perceived discrimination) and displayed decreased affirmation of their ethnic-racial identities as a result. As previously stated, dyads in the *Justice Salient* profile agreed on the existence of racial/ethnic bias in the scenario and came up with succinct ideas regarding how to handle the situation. They

also displayed less warmth during the interaction than dyads in some of the other profiles. However, displaying less warmth during a conversation about discrimination is not only warranted, but has also been shown to be a beneficial ERS approach for some youth. For example, an ERS profile similar to the *Justice Salient* profile (i.e., no-nonsense advocates) established with a sample of Black parent-adolescent dyads was found to protect sons, but not daughters, against discrimination (Dunbar et al., 2022). Therefore, although sex differences were not found in this study, the *Justice Salient* approach may be protective in contexts other than school or for different samples. This study's contribution with regard to identifying a similar ERS approach in a younger sample of a different socioeconomic standing may inspire future research on *Justice Salient* and no-nonsense ERS approaches.

## Findings for Latinx Youth

### *School Climate*

Being among the majority at school inspired greater exploration of ethnic-racial identity across the transition to middle school for the Latinx youth in this sample. In contrast, these same youth experienced decreased affirmation associated with greater perceived discrimination from students, adults at school, and society at large. By the time Wave 6 data collection began in fall 2018, the violent policy of separating children from their families at the Mexico-U.S. border had been widely reported on for several months. Consequently, it was a period of heightened political and social hostility toward Latinx communities and, thus, discrimination may have had more potent effects on Latinx youths' affirmation of ethnic-racial identity during this period. Latinx youth in this sample, on average, attended schools where Latinxs comprised 72% (*SD* = 23.28) of the student population, and a majority (57%) attended schools where the population of Latinx youth was greater than 75%. Past research suggests that rates of discrimination reach a peak,

then begin to decrease, after the population of racially and ethnically minoritized peoples in a context surpasses 50% (Seaton & Yip, 2009; Welch et al., 2001). In one study, Latinx immigrant youth attending predominantly Latinx schools were found to report the highest rates of peer, teacher, and community discrimination (Brown & Chu, 2012). However, the predominantly Latinx schools in this study averaged a 59% majority, which is far closer to the point at which discrimination is expected to peak than the 72% observed in the current study. In Brown and Chu (2012), being in the majority protected Latinx youth against peer and teacher discrimination, but whether their schools and teachers valued diversity mattered more for protecting against community discrimination. Therefore, school's valuing of diversity may be an important mechanism missing to explain why being among the majority exacerbated the effects of discrimination on affirmation in this sample.

Importantly, Latinx youth attending schools that were *not* predominantly Latinx (< 70%) reported increased affirmation two years later, resulting from positive school climates. In Brown and Chu (2012), youths' own ethnic-racial identities mattered more for their feelings of belonging at school when they were attending predominantly White or racially and ethnically diverse schools, whereas this association did not occur for Latinx students at predominantly Latinx schools. Together, these findings suggest that Latinx youth may experience more benefits for and from their ethnic-racial identities when the racial/ethnic composition of their environments necessitates a stronger sense of one's racial and ethnic self (Brown & Chu, 2012; Gharaei et al., 2019). In a sample of middle schoolers attending an ethnically and racially diverse school, school cultural pluralism and teacher supportiveness in sixth grade predicted more exploration, but not affirmation, in seventh grade (Camacho et al., 2018). Meanwhile, cultural pluralism in seventh grade predicted more affirmation in eighth grade. This suggests that, while

school climate effects on exploration may be more immediate, youth may need longer in their new school setting before effects on affirmation emerge. Further, as this study's findings suggest, the benefits of positive school climate may sustain even after the child has left that school.

***Dyadic Ethnic-Racial Socialization***

ERS altered the effects of positive school climates for Latinx youth in *Child-Dominant* dyads compared to those in the *Multifaceted* profile by predicting moderate decreases in exploration. Youth in *Child Dominant* dyads already demonstrated strength in their understanding of race- and ethnicity-related issues. Given the independence and knowledge they expressed during these conversations, the lower exploration they displayed may be evidence of a resolved ethnic-racial identity (Phinney & Chavira, 1992; Seaton et al., 2006). In contrast, youth in *Justice Salient Advocate* dyads engaged in increased identity exploration as a result of school climate and displayed more affirmation associated with positive school climates along with their peers in the *Low Engaged* approach. While the effect of discrimination for *Justice Salient* and *Low Engaged* youth aligns with findings in this study for the Black subsample, the finding that these two ERS approaches amplified the effects of positive school climates for exploration and affirmation is distinct. Caregivers and youth in the *Justice Salient* and *Low Engaged* profiles showed the same degree of engagement and warmth as each other. Although these youth demonstrated less confidence and provided less detailed responses than their *Child Dominant* and *High-Engaged* peers, they showed more interest in the conversation than the youth in *Parent-led* dyads. Therefore, in the same way that the Latinx youth in these profiles received the most benefits from positive school climates, they may be the best poised to benefit from school cultural socialization or ERS that involves scaffolding and teaching (Ladson-Billings, 1995).

## Implications

In this study and aligning with PVEST (Spencer, 1997), how youth processed a hypothetical experience of discrimination with caregivers influenced the way school climate affected their identity development. Given that school climate, discrimination, and dyadic ERS were measured at the same time point, it may be that caregivers and youth were responding to their perceptions of school climate during their ERS discussions. In this study, school climate and discrimination are positioned as predictors, and ERS is posited as a moderator in alignment with the theory guiding this study and prior research (Camacho et al., 2018; Del Toro & Wang, 2020; Griffin et al., 2020; L. V. Smith et al., 2020). Specifically, Spencer (1997) posits that intermediate experiences of stress precede youth's coping strategies. When youth repeatedly use the same strategies to cope, these reactive coping methods come to predict their emergent identities, like ethnic-racial identity (Spencer et al., 1997). Youth's coping strategies are the point at which to intervene if researchers want to benefit the products of their coping styles (e.g., relationships, health). Therefore, although ERS could itself be a predictor of ethnic-racial identity, it was in the interest of this study to assess youth and caregivers' joint devising of coping responses to discrimination as an existing process in family's lives that is both amenable to intervention and capable of protecting against less amenable risk factors like school climate and discrimination.

This study's findings regarding the ways five dyadic ERS approaches altered school climate effects for youth's ethnic-racial identity development has important implications for research and intervention. For example, *Multifaceted* ERS amplified the effects of positive school climates on Black students' desire to learn about their racial/ethnic group, while the same was not true for Latinx youth in the *Multifaceted* profile. Given that Latinx youth in this sample

were more likely to attend schools where they were in the majority—and the opposite was true for the Black youth in this sample—this may be an indication that high engagement in the ERS process and positive school climates are especially important for youth attending schools where they are outnumbered. Moreover, Black youth in the *Parent-Led* and *Child Dominant* profiles showed decreased identification with their racial/ethnic group across the transition to middle school, which may be a consequence of generally positive school climates that are not attuned to the needs of their Black youth. Therefore, these youth may stand to benefit the most from school-level interventions seeking to increase cultural pluralism and culturally relevant curriculum (Del Toro & Wang, 2020; Ladson-Billings, 1995). Moreover, results of the moderation by majority status suggest that Latinx youth in the majority at their school and/or experiencing more discrimination would also benefit from these schools initiatives (Brown & Chu, 2012). Finally, given they were not protected against discrimination, youth in the *Justice Salient Advocate* (both Black and Latinx youth) and *Low Engaged* (Latinx only) profiles may benefit the most from ERS interventions prioritizing teaching about race, ethnicity, and culture, such as the One Talk at a Time intervention presented by Stein et al. (2021).

**Limitations and Future Directions**

There are several limitations of this study and its findings in need of addressing. With regard to the measures used, research indicates that the influences of discrimination on ethnic-racial identity differ by the perpetrator of discrimination (e.g., teacher, peer; Brown & Chu, 2012; Rivas-Drake et al., 2009) and that schools themselves can be ethnically and racially socializing contexts (Byrd & Ahn, 2020). Therefore, future research would benefit from the inclusion of measures that capture peer, teacher, and community discrimination as distinct constructs and from the inclusion of measures that describe the extent to which the school's

curriculum and staff value diversity and engage in ERS. Further, although incorporating both caregivers' and youth's perceptions of school climate into the model was a strength of this study, future research would benefit from validated external observers measuring school climate. Testing the links between school climate and ethnic-racial identity in more diverse samples is also needed. In this sample, a majority of the Latinx families (96%) were of Mexican origin, and all of the Black families were U.S.-born. As a result, the findings presented here may not generalize to non-Mexican-origin Latinx families or immigrant Black families. Further, while recruiting families with low socioeconomic standing is a strength of this study, it similarly means that the findings of this analysis should not be generalized to samples with greater or more diverse socioeconomic standing.

Of note, the effects of school climate on ethnic-racial identity development could not be assessed for the Afro Latinx youth in this sample due to the small number included in this sample. As indicated in Table 3.3, the 12 Afro Latinx youth in this study reported similar rates of exploration and affirmation to their Black and Latinx peers in fifth grade but showed declines into seventh grade. The multiracial high schoolers in S. Fisher et al. (2014) displayed lower exploration and affirmation of identity than their Black peers and were more likely to display symptoms of depression and anxiety. Given the strength of association between ethnic-racial identity and mental health (Roberts et al., 1999), supporting the ethnic-racial identity development of Afro Latinx and multiracial youth before they transition to middle school may be an important point at which to intervene. Ultimately, more research is needed to investigate how effects differ for Afro Latinx youth from their multi-racial/ethnic and mono-racial/ethnic peers as it was beyond the scope of the current analysis to do so. Further, it is unfortunate that, due to limits of power suggested by the Monte Carlo simulations, the beneficial effects of positive

school climates for Black youth not in the minority at their school did not come to light. More research is needed to test the hypotheses drawn in this study with larger samples. Finally, as past research has shown (Brown & Chu, 2012), the interrelations of school climate, the racial/ethnic composition of the school, perceived discrimination, ERS, and ethnic-racial identity are complex and much can be elucidated from testing three-way interactions. Thus, the sample size and lack of statistical power to test three-way interactions (school climate X racial/ethnic composition X ERS; perceived discrimination X racial/ethnic composition X ERS) in predicting identity development is a limitation of this study.

**Conclusion**

In conclusion, research on the effects of school climate and the development of ethnic-racial identity among Black and Latinx youth has grown in recent years. As this research becomes more specific in its definitions of school climate and inclusion of various ethnic-racial identity constructs (e.g., ethnic-racial centrality), it will be important for scholars to also consider youths' engagement in the ERS process with primary socializing agents as influencing these effects. Specifically, how dyadic ERS influences youth's interpretations of school climate and perceived discrimination and, consequently, their school-related outcomes.

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**Table 3.1**

*Characteristics of Study Sample (N = 269)*

| Demographic characteristic | Child's race/ethnicity | | |
|---|---|---|---|
| | Non-Hispanic Black (*n* = 112) | Latinx (*n* = 157) | |
| | *n* (%) | *n* (%) | $\chi^2$ |
| Child sex | | | |
| Male | 66 (58.9) | 85 (54.1) | 0.61 |
| Female | 46 (41.1) | 72 (45.9) | |
| Child grade in Wave 6 | | | |
| Fourth | 3 (5.1) | 3 (3.9) | 5.24[a] |
| Fifth | 52 (88.1) | 58 (75.3) | |
| Sixth | 4 (6.8) | 16 (20.8) | |
| Child grade in Wave 8 | | | |
| Sixth | 3 (5.6) | 3 (3.8) | 4.92[a] |
| Seventh | 48 (88.9) | 62 (77.5) | |
| Eighth | 3 (5.6) | 15 (18.8) | |
| School type during Wave 6 | | | |
| Charter | 19 (17.0) | 24 (15.3) | 0.14 |
| Public | 93 (83.0) | 133 (84.7) | |
| Caregiver's race/ethnicity | | | |
| African American | 107 (95.5) | 5 (3.2) | 234.45*** |
| Latinx | 0 (0.0) | 139 (88.5) | |
| Non-Hispanic White | 1 (0.9) | 3 (1.9) | |
| Multiracial/ multiethnic | 4 (3.6) | 10 (6.4) | |
| Caregiver's relationship to child | | | |
| Mother | 94 (83.9) | 153 (97.4) | 11.08* |
| Father | 7 (6.2) | 2 (1.3) | |
| Grandmother | 9 (8.0) | 0 (0.0) | |
| Aunt | 1 (0.9) | 2 (1.3) | |
| Caregiver's level of education | | | |
| < High school | 13 (0.9) | 59 (37.6) | 29.45*** |
| ≥ High school | 99 (88.4) | 98 (62.4) | |
| Family's federal poverty level | | | |
| ≤50% | 49 (44.5) | 11 (7.0) | 56.19*** |
| 51-100% | 37 (33.6) | 78 (49.7) | |
| >100% | 24 (21.4) | 68 (43.3) | |
| Caregiver language | | | |
| English-dominant | | 6 (4.0) | |
| Spanish-dominant | | 90 (60.4) | |
| Bilingual | | 47 (31.5) | |
| Caregiver nativity | | | |
| U.S. born | | 34 (22.8) | |
| Foreign born | | 113 (75.8) | |

*Note.* Balance of cases are missing.

[a] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

**Table 3.2**

*Intercorrelations and Descriptive Statistics of Study Variables for the Full Sample (N = 269)*

| Variable Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **YR School Climate** | | | | | | | | | | |
| 1. Discrimination | — | | | | | | | | | |
| 2. Teacher relations | -.14* | — | | | | | | | | |
| 3. Student relations | -.18** | .63** | — | | | | | | | |
| 4. Fairness of rules | -.14* | .69** | .36** | — | | | | | | |
| 5. School safety | -.09 | .70** | .54** | .43** | — | | | | | |
| 6. Liking of school | -.18** | .68** | .49** | .65** | .64** | — | | | | |
| **CR School Climate** | | | | | | | | | | |
| 7. Teacher relations | -.04 | .50** | .36** | .31** | .38** | .41** | — | | | |
| 8. Student relations | -.08 | .52** | .39** | .38** | .40** | .38** | .61** | — | | |
| 9. Clear expectations | -.02 | .51** | .32** | .33** | .38** | .38** | .85** | .70** | — | |
| 10. Fairness of rules | -.01 | .57** | .40** | .38** | .46** | .40** | .79** | .82** | .80** | — |
| 11. School safety | -.02 | .59** | .42** | .31** | .45** | .39** | .76** | .74** | .89** | .80** |
| 12. Teacher-home | -.06 | .55** | .41** | .35** | .51** | .48** | .80** | .71** | .74** | .86** |
| 13. School satisfaction | -.02 | .62** | .45** | .39** | .54** | .50** | .85** | .76** | .80** | .90** |
| **Ethnic-Racial Identity** | | | | | | | | | | |
| 14. Exploration, W6 | .20** | -.04 | .03 | -.03 | -.10 | -.02 | -.09 | -.06 | -.08 | -.07 |
| 15. Affirmation, W6 | .03 | .13* | .16** | .13* | .15* | .13* | -.01 | .00 | -.04 | -.05 |
| 16. Exploration, W8 | -.04 | -.07 | -.04 | -.01 | -.05 | -.08 | -.01 | -.01 | -.04 | .00 |
| 17. Affirmation, W8 | -.19** | .03 | -.07 | .09 | .05 | .06 | .02 | .00 | .00 | -.01 |
| **Moderators** | | | | | | | | | | |
| 18. Dyadic ERS[a] | .03 | .10 | .09 | .07 | .09 | .10 | .10 | .05 | .11 | .06 |
| 19. School % Black | .05 | -.05 | -.14* | .07 | -.01 | .08 | -.12* | -.14* | -.12* | -.09 |
| 20. School % Latinx | -.04 | .02 | .12* | -.05 | .01 | -.04 | .12* | .19** | .14* | .14* |

*Note.* YR = youth report; CR = caregiver report; W6 = Wave 6; W8 = Wave 8. After imputation, ordinal variables can have values that are not whole numbers.

[a] Spearman's rho is used. 1 = Low Dyadic Engagement, 2 = Justice Salient Advocates, 3 = Parent-Led, 4 = Child-Dominant, 5 = Multifaceted Dyadic Engagement

* $p < .05$, ** $p < .01$.

**Table 3.2** ***Continued.***

*Intercorrelations and Descriptive Statistics of Study Variables for the Full Sample (N = 269)*

| Variable Name | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|
| **YR School Climate** | | | | | | | | | | |
| 1. Discrimination | | | | | | | | | | |
| 2. Teacher relations | | | | | | | | | | |
| 3. Student relations | | | | | | | | | | |
| 4. Fairness of rules | | | | | | | | | | |
| 5. School safety | | | | | | | | | | |
| 6. Liking of school | | | | | | | | | | |
| **CR School Climate** | | | | | | | | | | |
| 7. Teacher relations | | | | | | | | | | |
| 8. Student relations | | | | | | | | | | |
| 9. Clear expectations | | | | | | | | | | |
| 10. Fairness of rules | | | | | | | | | | |
| 11. School safety | — | | | | | | | | | |
| 12. Teacher-home | .75** | — | | | | | | | | |
| 13. School satisfaction | .83** | .91** | — | | | | | | | |
| **Ethnic-Racial Identity** | | | | | | | | | | |
| 14. Exploration, W6 | -.08 | -.09 | -.10 | — | | | | | | |
| 15. Affirmation, W6 | -.04 | -.01 | -.03 | .61** | — | | | | | |
| 16. Exploration, W8 | -.02 | -.04 | -.04 | .09 | -.02 | — | | | | |
| 17. Affirmation, W8 | .01 | .01 | -.02 | .02 | .04 | .62** | — | | | |
| **Moderators** | | | | | | | | | | |
| 18. Dyadic ERS[a] | .15* | .10 | .14* | .08 | .06 | -.06 | -.01 | — | | |
| 19. School % Black | -.06 | -.13* | -.09 | .06 | .08 | .04 | .03 | -.05 | — | |
| 20. School % Latinx | .12 | .16** | .15* | -.06 | -.07 | -.01 | -.06 | .121* | -.74** | — |

*Note.* YR = youth report; CR = caregiver report; W6 = Wave 6; W8 = Wave 8. After imputation, ordinal variables can have values that are not whole numbers.

[a] Spearman's rho is used. 1 = Low Dyadic Engagement, 2 = Justice Salient Advocates, 3 = Parent-Led, 4 = Child-Dominant, 5 = Multifaceted Dyadic Engagement

* $p < .05$, ** $p < .01$.

**Table 3.3**

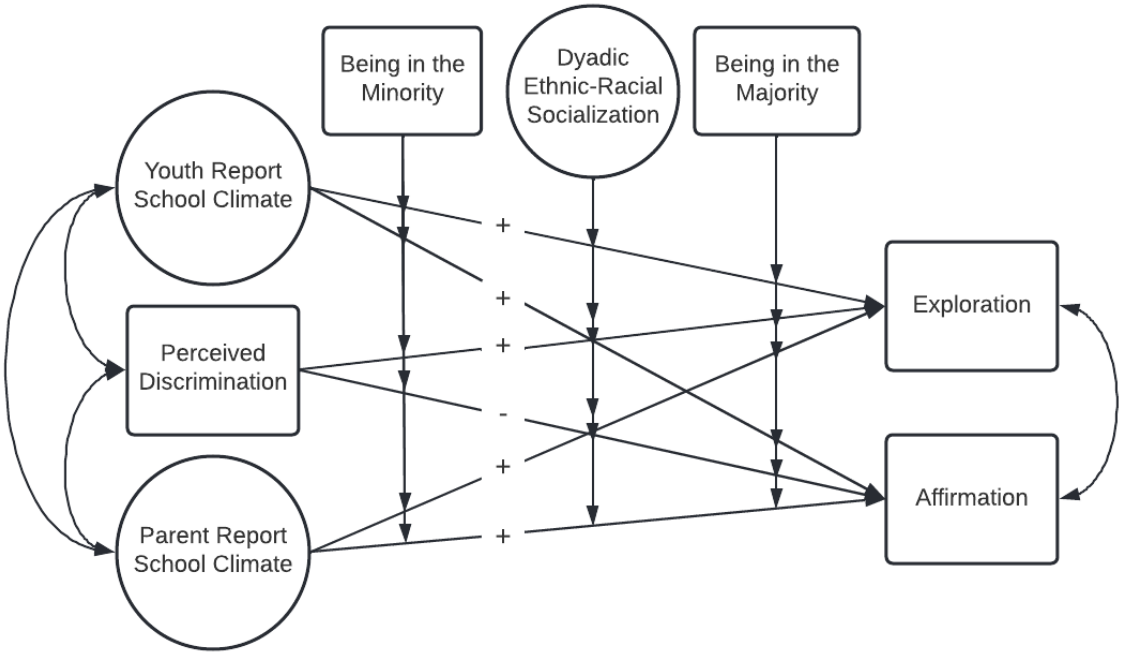
*Means and Standard Deviations for Black, Latinx, and Afro Latinx youth*

| Construct | Black (*n* = 112) | | Latinx (*n* = 145) | | Afro Latinx (*n* = 12) | |
|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | *M* | *SD* |
| Ethnic-Racial Identity | | | | | | |
| Exploration, W6 | 2.62 | 0.60 | 2.72 | 0.49 | 2.61 | 0.53 |
| Exploration, W8 | 2.73 | 0.51 | 2.69 | 0.56 | 2.34 | 0.73 |
| Affirmation, W6 | 3.24 | 0.49 | 3.26 | 0.44 | 3.40 | 0.51 |
| Affirmation, W8 | 3.33 | 0.51 | 3.27 | 0.50 | 3.05 | 0.44 |
| YR- School Climate | | | | | | |
| Discrimination | 1.52 | 0.60 | 1.47 | 0.52 | 1.31 | 0.34 |
| Teacher relations | 2.83 | 0.92 | 2.92 | 0.72 | 2.97 | 0.67 |
| Student relations | 2.59 | 0.93 | 2.75 | 0.73 | 2.80 | 0.80 |
| Fairness of rules | 2.72 | 0.86 | 2.66 | 0.86 | 2.91 | 0.58 |
| School safety | 2.87 | 1.06 | 2.95 | 0.78 | 2.82 | 0.87 |
| Liking of school | 2.62 | 0.90 | 2.62 | 0.87 | 2.64 | 1.01 |
| CR- School Climate | | | | | | |
| Teacher relations | 2.87 | 0.49 | 3.18 | 0.66 | 2.80 | 0.57 |
| Student relations | 2.63 | 0.62 | 3.07 | 0.73 | 2.78 | 0.67 |
| Clear expectations | 2.98 | 0.46 | 3.31 | 0.61 | 2.94 | 0.54 |
| Fairness of rules | 2.79 | 0.63 | 3.18 | 0.68 | 2.91 | 0.59 |
| School safety | 2.72 | 0.75 | 3.05 | 0.88 | 2.71 | 0.82 |
| Teacher-home | 2.75 | 0.61 | 3.11 | 0.75 | 2.87 | 0.56 |
| School satisfaction | 2.60 | 0.72 | 3.01 | 0.82 | 2.56 | 0.82 |

*Note.* YR = Youth report; CR = Caregiver Report.

**Figure 3.1**

*Conceptual Diagram of Study Hypotheses*



# CHAPTER 4

# 4. DISCUSSION AND CONCLUSION

## Discussion

### Review of Overarching Aims and Findings

The aim of this dissertation was to explore two important processes influencing the lives of Black and Latinx youth. Specifically, the process of engaging with caregivers in ethnic-racial socialization (ERS) and the influence of school experiences and ERS on ethnic-racial identity development. Additionally, the studies embedded in this dissertation are situated before and after youth transitioned to middle school (i.e., fifth and seventh grade), which is proposed to be an important, though relatively understudied, period in the development of ethnic-racial identity (Eccles et al., 2006; French et al., 2006; Tatum, 2017).

#### *Study 1*

In Study One, caregivers' and youth's joint approaches to an ERS conversation about a hypothetical experience of discrimination at school were examined for heterogeneity. Findings with this sample of 353 Dallas-based Black and Latinx youth and their primary caregivers with low socioeconomic standing suggested there were five distinct ERS patterns. In one profile of *Low Dyadic Engagement*, both caregivers and youth demonstrated low overall engagement in the task-generated conversation and received low ratings on dyadic warmth. In contrast, caregivers and youth in the *Multifaceted Dyadic Engagement* profile demonstrated high engagement in the conversation and were rated high on dyadic warmth. Findings also indicated two profiles in which one member of the dyad was more engaged than the other. These were the *Parent-Led* and

*Child Dominant* profiles. While caregivers in both profiles showed warmth and engagement, youth in the *Child Dominant* profile were agentic and talkative, while youth in the *Parent-Led* profile exhibited less confidence. Finally, dyads in the *Justice Salient Advocates* profile showed engagement and agreement on race- and ethnicity-related components of the dialogue and spent less time on emotion-focused topics or displays of warmth. Moreover, these patterns of ERS differed by several demographic characteristics of the dyads. Specifically, Black caregivers and youth were more likely to be in the *Justice Salient* profile, Latinx caregivers and caregivers with more education were more likely to be in the *Multifaceted* profile, Spanish-speaking Latinx caregivers were more likely to be in the *Child Dominant* profile, and, finally, non-Hispanic White caregivers were moderately more likely to be in the *Parent-Led* profile.

***Study 2***

In Study Two, the effects of school climate and discrimination on ethnic-racial identity development was examined with 112 Black and 145 Latinx youth and their primary caregivers derived from the Study One sample. While greater perceived discrimination predicted less affirmation of ethnic-racial identity among both Black and Latinx youth, as hypothesized, the hypothesis that positive school climates would benefit youth's ethnic-racial identity development depended on the type of ERS they engaged in with caregivers. Further, only Latinx youth showed increases in exploration of ethnic-racial identity from fifth to seventh grade. In addition to testing the main effects of school climate and discrimination, whether youth were in the minority or majority at their school was tested as altering the effects of school climate and discrimination. There were not enough Black youth in the majority at their schools or enough Latinx youth in the minority at their schools to test these effects. As a result, only whether being minoritized had an effect was tested for Black youth, and no significant differences were found.

Meanwhile, for Latinx youth, being in the majority at their schools exacerbated the effects of discrimination on affirmation. Further, fifth grade exploration led to increased exploration in seventh grade for Latinx youth in the majority only. For Latinx youth not in the majority at school, positive school climates benefited their feelings of belonging and commitment to, and affirmation of, their ethnic-racial identities.

Finally, whether the ERS youth engaged in with caregivers moderated the effects of school climate and discrimination on youth identity was tested using the five patterns of dyadic ERS determined in Study One. In the Black subsample, youth in the *Parent-Led* and *Child Dominant* profiles demonstrated decreases in their affirmation of identity as a result of positive school climates, which was not as hypothesized. As hypothesized, being in the *Multifaceted* ERS approach amplified the effects of positive school climates on their exploration of their race/ethnicity. Also as hypothesized, being in the *Justice Salient Advocates* profile—a profile in which dyadic awareness of racial/ethnic bias was more prominent than dyadic warmth and child-focused coping messages—did not protect against the effects of discrimination on youths' affirmation of identity. In the Latinx subsample, youth in the *Low-engaged* and *Justice Salient* profiles were found to benefit from positive school climates, demonstrating increased affirmation as a result. Youth in the *Justice Salient* profile also showed increased exploration associated with school climates. In contrast, dyadic ERS did not protect these same youths' affirmation of identity against the effects of discrimination. This highlights the importance of measuring both discrimination experiences and school climate. Finally, Latinx youth in the *Child Dominant* profile showed decreased exploration from fifth to seventh grade, which may be indicative of a resolved ethnic-racial identity. In the upcoming sections, I discuss the full implications of the findings of this dissertation for future research and intervention.

## Scientific Contributions and Future Directions

The two studies implemented in this dissertation have important implications for the field of research on ERS and ethnic-racial identity development among Black and Latinx families. While the first study highlighted the importance of examining ERS as a dyadic process co-constructed by caregivers and youth, the second study investigated the importance of school and family contexts for ethnic-racial identity development and identified several potential risk and protective factors therein. In addition to adding to the rich empirical foundations of literature that exist for ERS and ethnic-racial identity, the findings presented in this dissertation suggest several directions for future inquiry.

### *ERS Research*

Through the application of a new theory, the *Theory of Racial Socialization in Action* (TRSA; Smith-Bynum et al., 2016), the findings of Study One contribute to research on ERS in several important ways. Foremost among the contributions was the identification of five patterns of dyadic ERS with two racial/ethnic groups. Described in detail in Study One, little prior research has examined the simultaneous contributions of caregivers and youth to ERS conversations (Aguayo et al., 2021; Dunbar et al., 2022; Johnson, 2005; Lewis, 1999). Among those that have, only one included Latinx caregiver-child dyads (Aguayo et al., 2021) and only one identified subgroups of dyadic ERS patterns (Dunbar et al., 2022). Two of the identified dyadic patterns (i.e., *Multifaceted, Low Engaged*) align with past research of caregiver-directed ERS (Ayón et al., 2019; Caughy et al., 2011; Cooper et al., 2015; Dunbar et al., 2015; Metzger et al., 2020; Neblett et al., 2008; Smalls, 2010), and one profile—the *Justice Salient* approach—is similar to a profile identified by Dunbar et al. (2022) with their sample of Black parent-adolescent dyads. In contrast, two of the approaches outlined in Study One (i.e., *Child Dominant,*

*Parent-Led*) would not have been identified had only one member of the dyad been the focus of the analysis, thus underscoring the importance of analyzing both caregivers' and youth's contributions to the ERS process. Therefore, these five patterns of dyadic ERS are a substantial addition to the literature. The replication of this analysis in future research will help to determine how common place these and other patterns of dyadic ERS are. Additional expansions of this research include examining dyadic ERS with socializing agents other than caregivers (e.g., peers, siblings) and with triads (e.g., two caregivers and one child, one caregiver and two children of different ages) to better understand the breadth of ERS youth engage in in their daily lives.

In addition, this analysis has provided evidence for the utility of the TRSA (Smith-Bynum et al., 2016) for observing ERS as a social learning process embedded in the qualities of the caregiver-child relationship (Belsky, 1984; Darling & Steinberg, 1993; Vygotsky, 1978). In line with the tenets of the TRSA and the Theory of Parental Racial-Ethnic Socialization it builds from (Hughes & Chen, 1999; Smith-Bynum et al., 2016), some caregivers approached the conversation as a teaching opportunity (*Parent-Led*, *Multifaceted*), while others seemed not to have a plan as to how to address conversations about discrimination (*Low Engaged*). As reported in Study One, youth in *Parent-Led* dyads were more likely to present as shy, while youth in *Child Dominant* dyads were more likely to present as gregarious. By leading or following during the dialogue, the primary caregivers in these dyads were actively adapting to their child's temperamental needs—however, this was not explicitly tested. Therefore, an important direction for future research will be to consider youth's temperament as influencing how dyads engage with ERS (Smith-Bynum et al., 2016). For example, caregivers in one study were found to adapt to their child's early presentation of normative inhibitory control skills by providing comprehensive ERS in the context of a hypothetical police encounter (Osborne et al., *in*

*revision*). In contrast, for those children who were behind in their development of inhibitory control in preschool, a more pragmatic approach to ERS protected against higher externalizing and internalizing symptoms but was harmful over time to children who displayed more skills in inhibitory control in preschool (Osborne et al., *in revision*). Thus, an expansion of the literature into testing the effects of temperament for ERS in different contexts and with different outcomes would further benefit the field.

In Study One, some dyads demonstrated concordance in their understanding of the situation (*Multifaceted, Justice Salient*), while other dyads let one member dominate the dialogue (*Child Dominant, Parent-Led*). This raises questions for future research regarding what it means for the success of ERS for one member to lead during the dialogue. An assessment of what youth recall from the observational ERS task could facilitate tests of whether concordance during ERS discussions is an indication that youth are absorbing what caregivers are saying. Moreover, despite the concordance the dyads in the *Justice Salient* profile displayed, the findings of Study Two suggested that the imbalance of racial/ethnic bias awareness and preparedness over child-focused messages of support and cultural socialization mattered more for identity outcomes than concordance in dyadic ERS. Therefore, future research should explore the differential effects of ERS content, quality, and quantity for youth outcomes.

### *School Climate and Ethnic-Racial Identity*

Research on schools as socializing environs, although not a new concept, has increased in the last decade (Camacho et al., 2018; Del Toro & Wang, 2020; Griffin et al., 2020; L. V. Smith et al., 2020). The findings of Study Two regarding the effects of perceived school climate, experiences of discrimination and being in the minority or majority racial/ethnic group at school has contributed to this burgeoning area in a number of ways, not least of which was the

examination of effects for pre-adolescent youth as they transitioned to middle school. Several developmental and contextual changes that occur for youth during the middle school transition period are hypothesized to affect ethnic-racial identity development, including new school contexts, academic demands, and social circles, increased cognitive skills, autonomy, and self understanding (Else-Quest & Morse, 2015; Harter, 1986; Lerner & Steinberg, 2009; McGill et al., 2012; Tatum, 2017; Wampler et al., 2002). In this sample, rates of exploration and affirmation of ethnic-racial identity were comparable to those reported in older samples, indicating that these processes begin younger than has previously been explored in depth (Else-Quest & Morse, 2015; French et al., 2006; Pahl & Way, 2006; C. O. Smith et al., 2009). Longitudinal and experimental designs are needed to better understand the course and consequences of ethnic-racial identity development prior to adolescence.

Attending predominantly Latinx schools was expected to benefit Latinx youth's ethnic-racial identities, but this was not the case for youth in this sample (Brown & Chu, 2012). Thus, being in the majority may not always be protective. In fact, it exacerbated the negative effects of discrimination on Latinx youth's affirmation of identity. Data collection occurred during a period of escalated social and political hostility toward Latinx communities. Having more contact with their Latinx peers may have increased youth's awareness of the threats their communities were experiencing. While the effects on affirmation of identity were not anticipated, it points to an important area for future investigation. Specifically, and as originally depicted in Figure 1.1, future research should explore the impact of sociopolitical climate on youth's developing sense of self related to race and ethnicity. The findings of Study Two also presented preliminary evidence for the benefits of positive school climates when youth are not in the majority at their schools. Among the Black youth of this sample, who were more likely to be in the minority at

their schools, positive school climates increased exploration of identity when youth were also highly engaged in ERS with their caregivers. Meanwhile, for Latinx youth not in the majority at their school, positive school climates increased affirmation of identity. This underscores the importance of schools as socializing environs for Black and Latinx youth's ethnic-racial identities. Greater consistency in the definitions and measures used in school climate research is needed to further advance the field.

In support of Spencer's (1997) Phenomenological Variant of Ecological Systems Theory (PVEST), youth's processing of a hypothetical discriminatory experience at school with caregivers was found to change how school climate and discrimination impacted their developing ethnic-racial identities. For example, engaging in ERS that is more emblematic of racial literacy (*Multifaceted*) protected against experiences of discrimination and amplified the effects of positive school climates for Black youth, whereas a dyadic ERS approach that prioritized an awareness of racial/ethnic bias over child-centered coping messages (*Justice Salient*) exacerbated the effects of discrimination. Those Latinx youth that engaged in *Justice Salient* and *Low Engaged* ERS with caregivers were more vulnerable to discrimination but also benefitted the most from positive school climates. Positive school climates may benefit youth the most when the ERS they engage in with caregivers at home does not match their contextual needs (e.g., discrimination). In addition to testing the effects of discrimination and school climate simultaneously, future research should explore components of school climate, in addition to dyadic ERS, as protecting against discrimination. Considering the fit between youth's school experiences and the ERS they already engage in with caregivers at home has important implications for prevention and intervention, which I discuss next.

**Implications for Prevention and Intervention**

In testing the hypotheses of this dissertation, I have identified several avenues for ERS- and school-based interventions. For example, Black youth in profiles for which they dominated the conversation (*Child Dominant*) or developed less of their own solutions and largely followed their caregiver's lead (*Parent-Led*) showed decreased identification with their racial/ethnic group across the transition to middle school (i.e., fewer feelings of belonging to their group, less affirmation and commitment). Given that the Black youth in this sample were less likely to be in the majority racial/ethnic group at their school, this decrease in identification may have looked like trying to "fit in" with diverse peers and/or non-Black majority student populations. In contrast, the Latinx youth of this sample, who were more likely to attend schools where they were in the majority, did not display decreased affirmation as a result of positive school climates regardless of their dyadic ERS approach. As stated previously, caregivers in the *Child Dominant* and *Parent-Led* subgroups may already be adapting to their child's displays of temperament during ERS dialogues by leading or being led. Therefore, ERS-based interventions may have a less critical influence on these youth's school-related outcomes. Instead, it is more likely that the contexts of their schools need to change in order for the Black youth from *Parent-Led* and *Child Dominant* dyads to benefit from their school climates—either through greater promotion of cultural pluralism (i.e., valuing of diversity), socialization of culture via curriculum, or by increasing the percentage of Black students at the schools they attend (Del Toro & Wang, 2020; Ladson-Billings, 1995; L. V. Smith et al., 2020). With the last recommendation being the least practical for families, it is important that administrators of schools and districts where Black and Latinx youth are in the minority take the lead in increasing cultural pluralism and culturally relevant curriculum.

Regarding the relevancy for ERS-based prevention and intervention programs, practitioners should consider qualities of the caregiver-child relationship as central to the success of ERS. Together with prior research, findings from this dissertation suggest that recommendations to families that consider the goodness-of-fit between the dyad's existing ERS approach, characteristics of the child (e.g., temperament, maturity, gender), and the risks or benefits present in the child's school context will have the most success promoting youth identity outcomes (Osborne et al., *in revision;* Smith-Bynum et al., 2016). For example, while ERS seemed to protect Black youth's identification with their racial/ethnic group against discrimination, this was not the case for youth in the *Justice Salient Advocates* profile. Similarly, the Latinx youth in the *Justice Salient* and *Low Engaged* profiles were more vulnerable to discrimination but benefitted more from positive school climates than their peers in other profiles. Again, assessing youth's temperament for its influence on caregiver responses and the course of ERS dialogues would be beneficial here (Smith-Bynum et al., 2016). Even still, these dyads would likely benefit from ERS interventions that help caregivers and youth engage in more teaching about and preparing for discrimination, as well as supporting children's anger responses to discrimination (rather than anxiety, sadness, or fear responses; Dunbar et al., 2022). Given that the Latinx youth in the *Justice Salient* and *Low Engaged* profiles benefitted from positive values and norms in school, it stands to reason that they would benefit from ERS-based interventions in the school or home as well (Ladson-Billings, 1995).

Together, the findings of this dissertation have implications for several existing intervention programs based in the literature on ERS and ethnic-racial identity. For example, the findings regarding the benefits of *Multifaceted* ERS for Black youth in school contexts where they may be minoritized and/or experiencing discrimination lends support for the Racial

Encounter Coping Appraisal and Socialization Theory (RECAST; Anderson & Stevenson, 2019), such that ERS approaches seeking to boost youth's racial literacy may promote their ability to cope effectively with racism and lead to stronger ethnic-racial identities. The focus that One Talk at a Time (Stein et al., 2021) gives to caregivers and youth as partners in ERS is especially applicable to this dissertation. The One Talk at a Time intervention seeks to increase the preparedness, experience, and sense of efficacy caregivers and youth feel when engaging in ERS so that they already understand how to talk about racial/ethnic dilemmas together when real-life experiences arise (Stein et al., 2021). In applying the patterns of dyadic ERS identified in this dissertation to the One Talk at a Time intervention, it would be useful to know which dyads benefit the most from intervention and which show less change in their ERS approaches. Finally, the Identity Project's (Umaña-Taylor & Douglass, 2017; Umaña-Taylor et al., 2018) goal of promoting youth's ethnic-racial identity development through school-based programming aligns closely with Study Two's findings. Whereas the Identity Project originally targeted youth in high school, the findings of this dissertation suggestion that middle school samples would benefit from the intervention as well.

## Conclusion

The studies reported in this dissertation have added to extant literature regarding two important processes (ERS and ethnic-racial identity development) and two important contexts (family and school) in the lives of Black and Latinx youth. In Study One, five patterns of dyadic ERS were identified that have implications for ERS-based interventions such as One Talk at a Time (Stein et al., 2021) and the RECAST (Anderson & Stevenson, 2019). In Study Two, school climate and discrimination were found to affect the development of ethnic-racial identity for Black and Latinx pre-adolescents across the transition to middle school, which has implications

for programs like the Identity Project (Umaña-Taylor & Douglass, 2017; Umaña-Taylor et al., 2018). In summary, this dissertation identified ways that school contexts could improve to benefit youth's developing sense of self related to race and ethnicity across the transition to middle school. When faced with politics and policies that fail minoritized families in this country, promoting avenues to resilience—like ERS and ethnic-racial identity for Black and Latinx families—remains a critically important endeavor for social scientists.

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# APPENDIX

## APPENDIX A

**Full text of the Counselor scenario**

The example for boys is the version used in Black families and the example for girls is the version used in Spanish-speaking Latinx families.

#1 The School Counselor: Boys

Thomas is a black boy who always gets the best grades in his classes; he even won the Science Fair. His is friends think he should be in the Advanced Science class. His Science teacher tells him to go see the school counselor, Ms. Nelson, to get his class changed. Ms. Nelson is an older, white lady who's disliked by many students because they think she's racist. Thomas is a little nervous but really wants to win the Science Fair next year. He thinks the Advanced class will help. Thomas stops by Ms. Nelson's office and tells her he wants to change his class. Ms. Nelson says, "I don't know why you'd ask me about being in that advanced class. Kids like you don't belong in advanced classes."

How would you handle the situation if you were Thomas?

#2 Interacción con la policía: Niñas

Gabriela es una chica hispana que le encanta jugar afuera con sus amigas. Después de la escuela, planearon ir a sus casas por algo de comer y después reunirse cerca de la casa de Gabriela. Mientras Gabriela espera a sus amigas, nota que hay una patrulla de policía estacionada en la calle. El oficial conduce hacia ella, sale de su patrulla, y camina hacia Gabriela. El oficial dice, "¿Qué haces parada aquí? He oído a gente decir que lo único que ustedes niños hacen es pasar el rato en la calle." Gabriela nunca ha hablado con la policía antes.

¿Cómo manejarías la situación si fueras Gabriela?

APPENDIX B

**Summary of Monte Carlo Power Analyses**

Power analyses were conducted in M*plus* using Monte Carlo simulations. Statistical power is determined for each parameter individually and is influenced by the significance level (alpha or *p*-value), the size of the sample, and the magnitude of the variable's effect on the outcome of interest. Smaller effects and effects with larger significance levels require more statistical power to detect, and larger effects with smaller *p*-values require less power. Power increases with larger sample sizes and a power statistic at or near .80 is preferred.

In the structural equation model (SEM) for the Black subsample of 112, the power of the effect of perceived discrimination on affirmation was .358. During primary analyses, this effect was found to have a large significance level ($p = .091$) and small effect size ($R^2 = .02$) which, as stated, requires more power to detect. Indeed, when the sample size was tripled to 336, the power of this effect exceeded .80, suggesting that the effect may have been larger with a bigger sample. Power statistics for all effects determined to be non-significant ($p > .10$)—including those in the model for caregiver-report of school climate—did not surpass .80 after simulated sample size increases, indicating these were not the result of Type II Error.

In the SEM for the Latinx subsample of 145, power exceeded .80 to detect the effect of perceived discrimination on affirmation and the effect of exploration at Wave 6 on exploration at Wave 8. However, the power of the effect of perceived discrimination on exploration was .470 and that of Wave 6 exploration on Wave 8 affirmation was .384. This may be emblematic of the larger significance levels ($p = .078$ and $p = .094$, respectively) and smaller effect sizes (both $R^2 = .02$). The power for these parameters surpassed .80 when the sample size was tripled ($N = 435$),

suggesting the effect may have been larger with a larger sample. In contrast, power did not surpass .80 for all effects found to be non-significant in this model ($p > .10$).

Results of the power analysis for the model testing whether being in the minority moderated effects for the Black youth in this sample suggested that power was insufficient to detect one effect. Specifically, simulations suggested that a sample three times the size of Black youth not in the minority at their school may have been sufficient for an effect of caregiver reported school climate to be detected in the exploration model (power .821). This is suggestive of a Type II error and the non-significance of this parameter should be considered cautiously. Unfortunately, given that recruitment to this study was based on enrollment in 2010 to the parent study, obtaining a sample of that size was not possible. The findings of this model should be interpreted with caution. All other effects in this model did not increase in power with the larger sample size.

Finally, the power of the multigroup model for Latinx youth in which effects were moderated by the majority binary variable was tested. Power was sufficient for the effects of youth report of school climate on affirmation among youth not in the majority and of perceived discrimination for youth in the majority. Power was additionally sufficient for the prior timepoint of exploration for youth in the majority. The pattern of results for the model with affirmation as the outcome remained the same when the sample size was tripled. Additionally, results of the simulation suggested that the negative effects of perceived discrimination on identity exploration may have been significant for youth in the majority had the sample size been larger, thus imitating the findings already established for this group with affirmation as the outcome. The outputs of the Monte Carlo simulations are reported on the following pages. Power is reported for each parameter in the column labeled "% Sig Coeff."

Structural Equation Model, Black subsample
*N* = 112 and doubled to *N* = 336

Youth-Report of School Climate:

| | | ESTIMATES | | S. E. | M. S. E. | 95% | % Sig |
|---|---|---|---|---|---|---|---|
| | Population | Average | Std. Dev. | Average | | Cover | Coeff |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.805 | 0.8044 | 0.0886 | 0.0853 | 0.0078 | 0.950 | 1.000 |
| SMFRCW6 | 0.590 | 0.5884 | 0.0779 | 0.0792 | 0.0061 | 0.942 | 1.000 |
| SMSSFCW6 | 1.019 | 1.0293 | 0.0957 | 0.0924 | 0.0092 | 0.940 | 1.000 |
| SMLSCW6 | 0.747 | 0.7504 | 0.0900 | 0.0848 | 0.0081 | 0.942 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCC | -0.053 | -0.0529 | 0.0594 | 0.0626 | 0.0035 | 0.950 | 0.120 |
| ME_AFFMN ON | | | | | | | |
| SCC | -0.049 | -0.0501 | 0.0597 | 0.0612 | 0.0036 | 0.952 | 0.118 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.011 | -0.0019 | 0.0834 | 0.0847 | 0.0070 | 0.952 | 0.046 |
| ME_AFFMNCW | 0.009 | 0.0088 | 0.1334 | 0.1338 | 0.0178 | 0.946 | 0.058 |
| ME_EISMNCW | -0.026 | -0.0303 | 0.1097 | 0.1097 | 0.0120 | 0.954 | 0.056 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.139 | -0.1302 | 0.0849 | 0.0828 | 0.0073 | 0.938 | 0.358 |
| ME_EISMNCW | -0.057 | -0.0649 | 0.1098 | 0.1073 | 0.0121 | 0.944 | 0.100 |
| ME_AFFMNCW | 0.154 | 0.1593 | 0.1343 | 0.1308 | 0.0180 | 0.954 | 0.242 |

| | | ESTIMATES | | S. E. | M. S. E. | 95% | % Sig |
|---|---|---|---|---|---|---|---|
| | Population | Average | Std. Dev. | Average | | Cover | Coeff |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.805 | 0.8034 | 0.0479 | 0.0491 | 0.0023 | 0.958 | 1.000 |
| SMFRCW6 | 0.590 | 0.5911 | 0.0455 | 0.0455 | 0.0021 | 0.946 | 1.000 |
| SMSSFCW6 | 1.019 | 1.0223 | 0.0531 | 0.0528 | 0.0028 | 0.968 | 1.000 |
| SMLSCW6 | 0.747 | 0.7480 | 0.0482 | 0.0486 | 0.0023 | 0.950 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCC | -0.053 | -0.0523 | 0.0363 | 0.0360 | 0.0013 | 0.944 | 0.312 |
| ME_AFFMN ON | | | | | | | |
| SCC | -0.049 | -0.0491 | 0.0353 | 0.0352 | 0.0012 | 0.948 | 0.292 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.011 | -0.0101 | 0.0506 | 0.0490 | 0.0026 | 0.938 | 0.070 |
| ME_AFFMNCW | 0.009 | 0.0094 | 0.0771 | 0.0774 | 0.0059 | 0.948 | 0.060 |
| ME_EISMNCW | -0.026 | -0.0242 | 0.0629 | 0.0633 | 0.0039 | 0.944 | 0.062 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.139 | -0.1365 | 0.0492 | 0.0479 | 0.0024 | 0.938 | 0.820 |
| ME_EISMNCW | -0.057 | -0.0552 | 0.0626 | 0.0619 | 0.0039 | 0.926 | 0.138 |
| ME_AFFMNCW | 0.154 | 0.1549 | 0.0781 | 0.0756 | 0.0061 | 0.940 | 0.522 |

Caregiver-Report of School Climate:

| | | ESTIMATES | | S. E. | M. S. E. | 95% | % Sig |
|---|---|---|---|---|---|---|---|
| | Population | Average | Std. Dev. | Average | | Cover | Coeff |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 1.192 | 1.1977 | 0.1334 | 0.1358 | 0.0178 | 0.956 | 1.000 |
| SMCEPW6 | 0.856 | 0.8601 | 0.0818 | 0.0768 | 0.0067 | 0.948 | 1.000 |
| SMFRPW6 | 1.494 | 1.5080 | 0.1298 | 0.1301 | 0.0170 | 0.962 | 1.000 |
| SMSSFPW6 | 1.637 | 1.6511 | 0.1588 | 0.1598 | 0.0254 | 0.952 | 1.000 |
| SMTHCPW6 | 1.424 | 1.4406 | 0.1285 | 0.1274 | 0.0168 | 0.948 | 1.000 |
| SMSTSPW6 | 1.818 | 1.8318 | 0.1430 | 0.1434 | 0.0206 | 0.942 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCP | 0.129 | 0.1207 | 0.1397 | 0.1292 | 0.0195 | 0.924 | 0.170 |
| ME_AFFMN ON | | | | | | | |
| SCP | -0.051 | -0.0616 | 0.1349 | 0.1273 | 0.0183 | 0.940 | 0.078 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.001 | 0.0036 | 0.0870 | 0.0832 | 0.0076 | 0.952 | 0.048 |
| ME_AFFMNCW | -0.035 | -0.0236 | 0.1376 | 0.1297 | 0.0190 | 0.938 | 0.072 |
| ME_EISMNCW | 0.004 | -0.0005 | 0.1136 | 0.1103 | 0.0129 | 0.926 | 0.070 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.126 | -0.1225 | 0.0864 | 0.0821 | 0.0075 | 0.954 | 0.346 |
| ME_EISMNCW | -0.053 | -0.0544 | 0.1128 | 0.1089 | 0.0127 | 0.940 | 0.086 |
| ME_AFFMNCW | 0.134 | 0.1405 | 0.1369 | 0.1281 | 0.0187 | 0.936 | 0.210 |

| | | ESTIMATES | | S. E. | M. S. E. | 95% | % Sig |
|---|---|---|---|---|---|---|---|
| | Population | Average | Std. Dev. | Average | | Cover | Coeff |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 1.192 | 1.1959 | 0.0776 | 0.0779 | 0.0060 | 0.938 | 1.000 |
| SMCEPW6 | 0.856 | 0.8579 | 0.0446 | 0.0440 | 0.0020 | 0.942 | 1.000 |
| SMFRPW6 | 1.494 | 1.5017 | 0.0731 | 0.0743 | 0.0054 | 0.962 | 1.000 |
| SMSSFPW6 | 1.637 | 1.6417 | 0.0907 | 0.0914 | 0.0082 | 0.948 | 1.000 |
| SMTHCPW6 | 1.424 | 1.4316 | 0.0733 | 0.0727 | 0.0054 | 0.944 | 1.000 |
| SMSTSPW6 | 1.818 | 1.8257 | 0.0836 | 0.0818 | 0.0070 | 0.938 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCP | 0.129 | 0.1280 | 0.0731 | 0.0743 | 0.0053 | 0.946 | 0.390 |
| ME_AFFMN ON | | | | | | | |
| SCP | -0.051 | -0.0541 | 0.0710 | 0.0731 | 0.0050 | 0.958 | 0.106 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.001 | -0.0011 | 0.0497 | 0.0480 | 0.0025 | 0.948 | 0.058 |
| ME_AFFMNCW | -0.035 | -0.0344 | 0.0801 | 0.0750 | 0.0064 | 0.924 | 0.080 |
| ME_EISMNCW | 0.004 | 0.0077 | 0.0635 | 0.0636 | 0.0040 | 0.964 | 0.046 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.126 | -0.1269 | 0.0483 | 0.0473 | 0.0023 | 0.934 | 0.768 |
| ME_EISMNCW | -0.053 | -0.0515 | 0.0611 | 0.0627 | 0.0037 | 0.954 | 0.124 |
| ME_AFFMNCW | 0.134 | 0.1344 | 0.0740 | 0.0740 | 0.0055 | 0.938 | 0.410 |

Structural Equation Model, Latinx subsample
*N* = 145 and doubled to *N* = 435

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 0.952 | 0.9511 | 0.0770 | 0.0779 | 0.0059 | 0.946 | 1.000 |
| SMCEPW6 | 0.874 | 0.8699 | 0.0466 | 0.0451 | 0.0022 | 0.936 | 1.000 |
| SMFRPW6 | 1.059 | 1.0602 | 0.0608 | 0.0614 | 0.0037 | 0.956 | 1.000 |
| SMSSFPW6 | 1.231 | 1.2262 | 0.0911 | 0.0865 | 0.0083 | 0.934 | 1.000 |
| SMTHCPW6 | 1.193 | 1.1948 | 0.0650 | 0.0641 | 0.0042 | 0.938 | 1.000 |
| SMSTSPW6 | 1.387 | 1.3888 | 0.0623 | 0.0637 | 0.0039 | 0.952 | 1.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.619 | 0.6164 | 0.0942 | 0.0904 | 0.0089 | 0.922 | 1.000 |
| SMFRCW6 | 1.074 | 1.0725 | 0.0948 | 0.0944 | 0.0090 | 0.952 | 1.000 |
| SMSSFCW6 | 0.952 | 0.9562 | 0.0828 | 0.0871 | 0.0069 | 0.964 | 1.000 |
| SMLSCW6 | 1.191 | 1.1940 | 0.0892 | 0.0863 | 0.0080 | 0.950 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCC | -0.056 | -0.0493 | 0.1159 | 0.1107 | 0.0135 | 0.952 | 0.090 |
| SCP | -0.036 | -0.0406 | 0.1145 | 0.1104 | 0.0131 | 0.940 | 0.078 |
| ME_AFFMN ON | | | | | | | |
| SCC | 0.080 | 0.0857 | 0.1053 | 0.0985 | 0.0111 | 0.940 | 0.160 |
| SCP | -0.047 | -0.0529 | 0.1065 | 0.0982 | 0.0114 | 0.922 | 0.108 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.157 | -0.1664 | 0.0943 | 0.0891 | 0.0090 | 0.948 | 0.470 |
| ME_AFFMNCW | -0.212 | -0.2181 | 0.1354 | 0.1309 | 0.0183 | 0.936 | 0.384 |
| ME_EISMNCW | 0.327 | 0.3388 | 0.1166 | 0.1172 | 0.0137 | 0.942 | 0.818 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.255 | -0.2608 | 0.0786 | 0.0792 | 0.0062 | 0.950 | 0.910 |
| ME_EISMNCW | 0.174 | 0.1759 | 0.1029 | 0.1042 | 0.0106 | 0.948 | 0.382 |
| ME_AFFMNCW | -0.071 | -0.0712 | 0.1227 | 0.1164 | 0.0150 | 0.932 | 0.112 |

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 0.952 | 0.9493 | 0.0438 | 0.0449 | 0.0019 | 0.964 | 1.000 |
| SMCEPW6 | 0.874 | 0.8721 | 0.0273 | 0.0260 | 0.0007 | 0.940 | 1.000 |
| SMFRPW6 | 1.059 | 1.0582 | 0.0367 | 0.0353 | 0.0013 | 0.938 | 1.000 |
| SMSSFPW6 | 1.231 | 1.2272 | 0.0526 | 0.0498 | 0.0028 | 0.936 | 1.000 |
| SMTHCPW6 | 1.193 | 1.1932 | 0.0379 | 0.0369 | 0.0014 | 0.942 | 1.000 |
| SMSTSPW6 | 1.387 | 1.3876 | 0.0365 | 0.0367 | 0.0013 | 0.954 | 1.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.619 | 0.6207 | 0.0533 | 0.0524 | 0.0028 | 0.936 | 1.000 |
| SMFRCW6 | 1.074 | 1.0752 | 0.0552 | 0.0546 | 0.0030 | 0.940 | 1.000 |
| SMSSFCW6 | 0.952 | 0.9560 | 0.0493 | 0.0504 | 0.0024 | 0.956 | 1.000 |
| SMLSCW6 | 1.191 | 1.1939 | 0.0494 | 0.0499 | 0.0024 | 0.950 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCC | -0.056 | -0.0565 | 0.0647 | 0.0639 | 0.0042 | 0.950 | 0.154 |
| SCP | -0.036 | -0.0335 | 0.0668 | 0.0636 | 0.0045 | 0.944 | 0.096 |
| ME_AFFMN ON | | | | | | | |
| SCC | 0.080 | 0.0800 | 0.0558 | 0.0566 | 0.0031 | 0.958 | 0.292 |
| SCP | -0.047 | -0.0464 | 0.0558 | 0.0563 | 0.0031 | 0.944 | 0.138 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.157 | -0.1591 | 0.0523 | 0.0515 | 0.0027 | 0.936 | 0.882 |
| ME_AFFMNCW | -0.212 | -0.2129 | 0.0793 | 0.0754 | 0.0063 | 0.942 | 0.790 |
| ME_EISMNCW | 0.327 | 0.3336 | 0.0681 | 0.0675 | 0.0047 | 0.956 | 0.998 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.255 | -0.2574 | 0.0447 | 0.0455 | 0.0020 | 0.956 | 1.000 |
| ME_EISMNCW | 0.174 | 0.1766 | 0.0600 | 0.0597 | 0.0036 | 0.954 | 0.834 |
| ME_AFFMNCW | -0.071 | -0.0661 | 0.0678 | 0.0667 | 0.0046 | 0.956 | 0.178 |

Moderation by minority for Black youth
*N* = 112, Group 1 (non-minority) *n* = 67, Group 2 (minority) *n* = 44

## Affirmation Outcome:

MODEL RESULTS

Group G1

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 1.244 | 1.2804 | 0.2350 | 0.2142 | 0.0563 | 0.940 | 1.000 |
| SMCEPW6 | 0.903 | 0.9123 | 0.1040 | 0.1060 | 0.0108 | 0.945 | 1.000 |
| SMFRPW6 | 1.524 | 1.5580 | 0.1966 | 0.1823 | 0.0396 | 0.940 | 1.000 |
| SMSSFPW6 | 1.688 | 1.7201 | 0.2338 | 0.2201 | 0.0554 | 0.940 | 1.000 |
| SMTHCPW6 | 1.435 | 1.4774 | 0.1864 | 0.1803 | 0.0363 | 0.945 | 1.000 |
| SMSTSPW6 | 1.844 | 1.8966 | 0.2253 | 0.2094 | 0.0532 | 0.929 | 1.000 |
| ME_AFFMN ON | | | | | | | |
| SCP | -0.014 | -0.0437 | 0.1967 | 0.1798 | 0.0394 | 0.945 | 0.066 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.135 | -0.1434 | 0.1257 | 0.1223 | 0.0158 | 0.951 | 0.235 |
| ME_EISMNCW | -0.178 | -0.1737 | 0.1732 | 0.1669 | 0.0299 | 0.945 | 0.197 |
| ME_AFFMNCW | 0.209 | 0.1941 | 0.2416 | 0.2139 | 0.0583 | 0.934 | 0.175 |
| SCCHARW56 | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| AVINCOMEW8 | -0.244 | -0.2498 | 0.1053 | 0.0967 | 0.0111 | 0.918 | 0.716 |

Group G2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.3459 | 0.0797 | 18.4323 | 0.4341 | 1.000 | 0.000 |
| SMSSRPW6 | 1.244 | 0.4371 | 0.1197 | 23.4161 | 0.6654 | 1.000 | 0.000 |
| SMCEPW6 | 0.903 | 0.3132 | 0.0855 | 16.7568 | 0.3551 | 1.000 | 0.000 |
| SMFRPW6 | 1.524 | 0.5357 | 0.1260 | 28.6404 | 0.9925 | 1.000 | 0.000 |
| SMSSFPW6 | 1.688 | 0.5906 | 0.1592 | 31.5762 | 1.2295 | 1.000 | 0.000 |
| SMTHCPW6 | 1.435 | 0.5004 | 0.1263 | 26.7459 | 0.8893 | 1.000 | 0.000 |
| SMSTSPW6 | 1.844 | 0.6458 | 0.1502 | 34.5409 | 1.4582 | 1.000 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| SCP | 0.074 | 0.0254 | 0.0594 | 2.6345 | 0.0059 | 1.000 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.088 | -0.1019 | 0.1101 | 0.0944 | 0.0122 | 0.885 | 0.246 |
| ME_EISMNCW | 0.094 | 0.0889 | 0.1185 | 0.1126 | 0.0140 | 0.934 | 0.148 |
| ME_AFFMNCW | 0.131 | 0.1461 | 0.1406 | 0.1269 | 0.0199 | 0.918 | 0.257 |
| SCCHARW56 | -0.355 | -0.3607 | 0.1700 | 0.1601 | 0.0288 | 0.929 | 0.628 |
| AVINCOMEW8 | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |

## Exploration Outcome:

MODEL RESULTS

Group G1

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 1.229 | 1.2333 | 0.2463 | 0.2066 | 0.0603 | 0.912 | 1.000 |
| SMCEPW6 | 0.872 | 0.8748 | 0.1126 | 0.1024 | 0.0126 | 0.929 | 1.000 |
| SMFRPW6 | 1.538 | 1.5440 | 0.2071 | 0.1775 | 0.0427 | 0.918 | 1.000 |
| SMSSFPW6 | 1.659 | 1.6591 | 0.2516 | 0.2116 | 0.0629 | 0.924 | 1.000 |
| SMTHCPW6 | 1.450 | 1.4479 | 0.2041 | 0.1752 | 0.0414 | 0.935 | 1.000 |
| SMSTSPW6 | 1.865 | 1.8730 | 0.2508 | 0.2042 | 0.0626 | 0.894 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCP | 0.292 | 0.2674 | 0.1920 | 0.1816 | 0.0372 | 0.918 | 0.300 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.026 | -0.0377 | 0.1212 | 0.1138 | 0.0147 | 0.924 | 0.088 |
| ME_AFFMNCW | -0.135 | -0.1541 | 0.2020 | 0.2013 | 0.0409 | 0.965 | 0.141 |
| ME_EISMNCW | 0.051 | 0.0708 | 0.1666 | 0.1587 | 0.0280 | 0.929 | 0.088 |

Group G2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.3060 | 0.0679 | 15.9056 | 0.4863 | 1.000 | 0.000 |
| SMSSRPW6 | 1.229 | 0.3723 | 0.0976 | 19.3042 | 0.7433 | 1.000 | 0.000 |
| SMCEPW6 | 0.872 | 0.2629 | 0.0626 | 13.6422 | 0.3749 | 1.000 | 0.000 |
| SMFRPW6 | 1.538 | 0.4728 | 0.1068 | 24.4855 | 1.1459 | 1.000 | 0.000 |
| SMSSFPW6 | 1.659 | 0.5062 | 0.1189 | 26.3148 | 1.3431 | 1.000 | 0.000 |
| SMTHCPW6 | 1.450 | 0.4423 | 0.1049 | 23.0593 | 1.0263 | 1.000 | 0.000 |
| SMSTSPW6 | 1.865 | 0.5721 | 0.1179 | 29.6988 | 1.6855 | 1.000 | 0.000 |
| ME_EISMN ON | | | | | | | |
| SCP | -0.101 | -0.0317 | 0.0626 | 2.8461 | 0.0087 | 1.000 | 0.000 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | 0.007 | 0.0077 | 0.1166 | 0.1081 | 0.0135 | 0.924 | 0.082 |
| ME_AFFMNCW | 0.049 | 0.0547 | 0.1616 | 0.1575 | 0.0260 | 0.941 | 0.071 |
| ME_EISMNCW | -0.047 | -0.0495 | 0.1524 | 0.1334 | 0.0231 | 0.906 | 0.124 |

Moderation by minority for Black youth-Affirmation Outcome
*N* = 112, Group 1 (non-minority) *n* = 201, Group 2 (minority) *n* = 132

Affirmation Outcome:

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| Group G1 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 1.244 | 1.2584 | 0.1200 | 0.1186 | 0.0145 | 0.946 | 1.000 |
| SMCEPW6 | 0.903 | 0.9057 | 0.0631 | 0.0583 | 0.0040 | 0.907 | 1.000 |
| SMFRPW6 | 1.524 | 1.5362 | 0.1010 | 0.1002 | 0.0103 | 0.951 | 1.000 |
| SMSSFPW6 | 1.688 | 1.6999 | 0.1210 | 0.1215 | 0.0147 | 0.946 | 1.000 |
| SMTHCPW6 | 1.435 | 1.4432 | 0.0995 | 0.0989 | 0.0099 | 0.937 | 1.000 |
| SMSTSPW6 | 1.844 | 1.8620 | 0.1109 | 0.1148 | 0.0126 | 0.966 | 1.000 |
| ME_AFFMN ON | | | | | | | |
| SCP | -0.014 | -0.0077 | 0.1039 | 0.1006 | 0.0108 | 0.927 | 0.054 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.135 | -0.1277 | 0.0652 | 0.0712 | 0.0043 | 0.976 | 0.410 |
| ME_EISMNCW | -0.178 | -0.1913 | 0.0859 | 0.0952 | 0.0075 | 0.966 | 0.556 |
| ME_AFFMNCW | 0.209 | 0.2278 | 0.1212 | 0.1227 | 0.0150 | 0.951 | 0.493 |
| SCCHARW56 | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| AVINCOMEW8 | -0.244 | -0.2437 | 0.0634 | 0.0552 | 0.0040 | 0.917 | 0.971 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group G2 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.3618 | 0.0757 | 11.8500 | 0.4130 | 1.000 | 0.000 |
| SMSSRPW6 | 1.244 | 0.4504 | 0.1036 | 14.7348 | 0.6405 | 1.000 | 0.000 |
| SMCEPW6 | 0.903 | 0.3262 | 0.0717 | 10.6837 | 0.3379 | 1.000 | 0.000 |
| SMFRPW6 | 1.524 | 0.5513 | 0.1138 | 18.0403 | 0.9590 | 1.000 | 0.000 |
| SMSSFPW6 | 1.688 | 0.6110 | 0.1308 | 19.9938 | 1.1770 | 1.000 | 0.000 |
| SMTHCPW6 | 1.435 | 0.5203 | 0.1086 | 17.0503 | 0.8485 | 1.000 | 0.000 |
| SMSTSPW6 | 1.844 | 0.6686 | 0.1368 | 21.9142 | 1.4001 | 1.000 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| SCP | 0.074 | 0.0240 | 0.0295 | 0.9861 | 0.0034 | 0.976 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.088 | -0.0969 | 0.0520 | 0.0549 | 0.0028 | 0.961 | 0.400 |
| ME_EISMNCW | 0.094 | 0.1077 | 0.0658 | 0.0659 | 0.0045 | 0.956 | 0.390 |
| ME_AFFMNCW | 0.131 | 0.1169 | 0.0790 | 0.0738 | 0.0064 | 0.917 | 0.351 |
| SCCHARW56 | -0.355 | -0.3555 | 0.0957 | 0.0931 | 0.0091 | 0.937 | 0.966 |
| AVINCOMEW8 | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |

Exploration Outcome:

MODEL RESULTS

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| Group G1 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 1.229 | 1.2275 | 0.1176 | 0.1190 | 0.0138 | 0.949 | 1.000 |
| SMCEPW6 | 0.872 | 0.8752 | 0.0586 | 0.0586 | 0.0034 | 0.944 | 1.000 |
| SMFRPW6 | 1.538 | 1.5519 | 0.1061 | 0.1027 | 0.0114 | 0.949 | 1.000 |
| SMSSFPW6 | 1.659 | 1.6674 | 0.1324 | 0.1221 | 0.0175 | 0.923 | 1.000 |
| SMTHCPW6 | 1.450 | 1.4623 | 0.0985 | 0.1015 | 0.0098 | 0.959 | 1.000 |
| SMSTSPW6 | 1.865 | 1.8873 | 0.1304 | 0.1183 | 0.0174 | 0.923 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCP | 0.292 | 0.2916 | 0.1042 | 0.1034 | 0.0108 | 0.954 | 0.821 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.026 | -0.0282 | 0.0701 | 0.0656 | 0.0049 | 0.938 | 0.067 |
| ME_AFFMNCW | -0.135 | -0.1217 | 0.1168 | 0.1150 | 0.0137 | 0.933 | 0.179 |
| ME_EISMNCW | 0.051 | 0.0487 | 0.0954 | 0.0910 | 0.0091 | 0.944 | 0.097 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group G2 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.3339 | 0.0656 | 10.4420 | 0.4480 | 1.000 | 0.000 |
| SMSSRPW6 | 1.229 | 0.4055 | 0.0819 | 12.6419 | 0.6848 | 1.000 | 0.000 |
| SMCEPW6 | 0.872 | 0.2927 | 0.0601 | 9.1655 | 0.3392 | 1.000 | 0.000 |
| SMFRPW6 | 1.538 | 0.5109 | 0.1039 | 15.9754 | 1.0658 | 1.000 | 0.000 |
| SMSSFPW6 | 1.659 | 0.5598 | 0.1156 | 17.4746 | 1.2216 | 1.000 | 0.000 |
| SMTHCPW6 | 1.450 | 0.4838 | 0.0969 | 15.1046 | 0.9429 | 1.000 | 0.000 |
| SMSTSPW6 | 1.865 | 0.6210 | 0.1202 | 19.3478 | 1.5620 | 1.000 | 0.000 |
| ME_EISMN ON | | | | | | | |
| SCP | -0.101 | -0.0285 | 0.0351 | 1.1458 | 0.0065 | 0.979 | 0.000 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | 0.007 | 0.0091 | 0.0601 | 0.0626 | 0.0036 | 0.949 | 0.051 |
| ME_AFFMNCW | 0.049 | 0.0516 | 0.0890 | 0.0905 | 0.0079 | 0.938 | 0.097 |
| ME_EISMNCW | -0.047 | -0.0492 | 0.0794 | 0.0755 | 0.0063 | 0.944 | 0.108 |

Moderation by majority for Latinx youth
*N* = 145, Group 1 (non-majority) *n* = 57, Group 2 (majority) *n* = 88

## Affirmation:

MODEL RESULTS

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| Group G1 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.9486 | 0.1761 | 0.1524 | 0.0307 | 0.929 | 1.000 |
| SMCEPW6 | 0.855 | 0.8650 | 0.0845 | 0.0826 | 0.0071 | 0.971 | 1.000 |
| SMFRPW6 | 1.044 | 1.0592 | 0.1166 | 0.1179 | 0.0136 | 0.943 | 1.000 |
| SMSSFPW6 | 1.240 | 1.2580 | 0.1552 | 0.1515 | 0.0241 | 0.986 | 1.000 |
| SMTHCPW6 | 1.183 | 1.1852 | 0.1191 | 0.1202 | 0.0140 | 0.957 | 1.000 |
| SMSTSPW6 | 1.375 | 1.3849 | 0.1181 | 0.1264 | 0.0138 | 0.929 | 1.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.618 | 0.6082 | 0.1701 | 0.1569 | 0.0286 | 0.929 | 0.971 |
| SMFRCW6 | 0.790 | 0.7784 | 0.1642 | 0.1619 | 0.0267 | 0.943 | 1.000 |
| SMSSFCW6 | 0.893 | 0.9003 | 0.1903 | 0.1737 | 0.0357 | 0.957 | 1.000 |
| SMLSCW6 | 1.219 | 1.2208 | 0.2008 | 0.1853 | 0.0397 | 0.943 | 1.000 |
| ME_AFFMN ON | | | | | | | |
| SCC | 0.288 | 0.3296 | 0.2298 | 0.1498 | 0.0538 | 0.857 | 0.657 |
| SCP | -0.128 | -0.1665 | 0.2051 | 0.1468 | 0.0430 | 0.914 | 0.314 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.055 | -0.0751 | 0.1150 | 0.1166 | 0.0134 | 0.971 | 0.129 |
| ME_AFFMNCW | 0.161 | 0.1598 | 0.1473 | 0.1360 | 0.0214 | 0.929 | 0.243 |
| ME_EISMNCW | -0.069 | -0.0860 | 0.1409 | 0.1371 | 0.0198 | 0.957 | 0.071 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group G2 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.4607 | 0.0596 | 15.4104 | 0.2944 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.4317 | 0.0686 | 14.4080 | 0.2600 | 1.000 | 0.000 |
| SMCEPW6 | 0.855 | 0.3939 | 0.0534 | 13.1660 | 0.2154 | 1.000 | 0.000 |
| SMFRPW6 | 1.044 | 0.4797 | 0.0610 | 16.0083 | 0.3221 | 1.000 | 0.000 |
| SMSSFPW6 | 1.240 | 0.5718 | 0.0812 | 19.0569 | 0.4530 | 1.000 | 0.000 |
| SMTHCPW6 | 1.183 | 0.5432 | 0.0681 | 18.1267 | 0.4139 | 1.000 | 0.000 |
| SMSTSPW6 | 1.375 | 0.6340 | 0.0792 | 21.1643 | 0.5552 | 1.000 | 0.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 0.5723 | 0.0864 | 18.7966 | 0.1903 | 1.000 | 0.000 |
| SMSSRCW6 | 0.618 | 0.3586 | 0.0692 | 11.7456 | 0.0720 | 1.000 | 0.000 |
| SMFRCW6 | 0.790 | 0.4643 | 0.0878 | 15.3158 | 0.1137 | 1.000 | 0.000 |
| SMSSFCW6 | 0.893 | 0.5266 | 0.0840 | 17.4769 | 0.1412 | 1.000 | 0.000 |
| SMLSCW6 | 1.219 | 0.7066 | 0.0974 | 23.2244 | 0.2719 | 1.000 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| SCC | -0.120 | -0.0875 | 0.0625 | 2.8965 | 0.0049 | 1.000 | 0.000 |
| SCP | 0.049 | 0.0382 | 0.0531 | 1.7967 | 0.0029 | 1.000 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.375 | -0.3916 | 0.0928 | 0.0981 | 0.0088 | 0.957 | 0.971 |
| ME_AFFMNCW | -0.087 | -0.0720 | 0.1410 | 0.1507 | 0.0198 | 0.986 | 0.029 |
| ME_EISMNCW | 0.188 | 0.1718 | 0.1187 | 0.1288 | 0.0142 | 0.957 | 0.200 |

## Exploration:

MODEL RESULTS

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| Group G1 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.9210 | 0.1861 | 0.1499 | 0.0344 | 0.871 | 1.000 |
| SMCEPW6 | 0.854 | 0.8489 | 0.0887 | 0.0817 | 0.0078 | 0.914 | 1.000 |
| SMFRPW6 | 1.047 | 1.0352 | 0.1326 | 0.1122 | 0.0175 | 0.829 | 1.000 |
| SMSSFPW6 | 1.238 | 1.2460 | 0.1778 | 0.1485 | 0.0312 | 0.886 | 1.000 |
| SMTHCPW6 | 1.184 | 1.1955 | 0.1320 | 0.1163 | 0.0173 | 0.900 | 1.000 |
| SMSTSPW6 | 1.377 | 1.3969 | 0.1590 | 0.1231 | 0.0253 | 0.886 | 1.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.651 | 0.6487 | 0.1774 | 0.1706 | 0.0310 | 0.914 | 0.971 |
| SMFRCW6 | 0.797 | 0.7955 | 0.1724 | 0.1689 | 0.0293 | 0.957 | 0.971 |
| SMSSFCW6 | 0.941 | 0.8907 | 0.1748 | 0.1847 | 0.0326 | 0.943 | 1.000 |
| SMLSCW6 | 1.222 | 1.2153 | 0.2217 | 0.1947 | 0.0485 | 0.914 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCP | 0.225 | 0.2623 | 0.1783 | 0.1747 | 0.0327 | 0.971 | 0.329 |
| SCC | -0.041 | -0.0403 | 0.2171 | 0.1734 | 0.0464 | 0.971 | 0.043 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.032 | -0.0167 | 0.1550 | 0.1431 | 0.0239 | 0.957 | 0.043 |
| ME_AFFMNCW | -0.071 | -0.0861 | 0.1439 | 0.1373 | 0.0206 | 0.957 | 0.100 |
| ME_EISMNCW | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| PC_EDUC4PW | -0.095 | -0.0791 | 0.0618 | 0.0647 | 0.0040 | 0.957 | 0.286 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Group G2 | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.5538 | 0.0791 | 19.8460 | 0.2053 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.5157 | 0.0783 | 18.4110 | 0.1835 | 1.000 | 0.000 |
| SMCEPW6 | 0.854 | 0.4716 | 0.0740 | 16.8571 | 0.1517 | 1.000 | 0.000 |
| SMFRPW6 | 1.047 | 0.5748 | 0.0785 | 20.5879 | 0.2290 | 1.000 | 0.000 |
| SMSSFPW6 | 1.238 | 0.6855 | 0.0969 | 24.4779 | 0.3145 | 1.000 | 0.000 |
| SMTHCPW6 | 1.184 | 0.6523 | 0.0864 | 23.3903 | 0.2901 | 1.000 | 0.000 |
| SMSTSPW6 | 1.377 | 0.7616 | 0.1078 | 27.2824 | 0.3901 | 1.000 | 0.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 0.7669 | 0.1434 | 29.2829 | 0.0746 | 1.000 | 0.000 |
| SMSSRCW6 | 0.651 | 0.4992 | 0.1052 | 18.9599 | 0.0340 | 1.000 | 0.000 |
| SMFRCW6 | 0.797 | 0.6158 | 0.1512 | 23.3515 | 0.0554 | 1.000 | 0.000 |
| SMSSFCW6 | 0.941 | 0.7072 | 0.1472 | 27.0685 | 0.0760 | 1.000 | 0.000 |
| SMLSCW6 | 1.222 | 0.9341 | 0.1677 | 35.6358 | 0.1106 | 1.000 | 0.000 |
| ME_EISMN ON | | | | | | | |
| SCP | -0.112 | -0.0547 | 0.0797 | 2.7367 | 0.0095 | 1.000 | 0.000 |
| SCC | -0.158 | -0.1299 | 0.1236 | 5.3412 | 0.0158 | 1.000 | 0.000 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.256 | -0.2587 | 0.1142 | 0.1107 | 0.0129 | 0.929 | 0.629 |
| ME_AFFMNCW | -0.158 | -0.1597 | 0.1569 | 0.1767 | 0.0243 | 0.971 | 0.143 |
| ME_EISMNCW | 0.364 | 0.3801 | 0.1558 | 0.1507 | 0.0242 | 0.943 | 0.657 |
| PC_EDUC4PW | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |

Moderation by majority for Latinx youth
*N* = 435, Group 1 (non-majority) *n* = 171, Group 2 (majority) *n* = 264

## Affirmation Outcome:

MODEL RESULTS

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| **Group G1** | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.9340 | 0.1029 | 0.0864 | 0.0104 | 0.904 | 1.000 |
| SMCEPW6 | 0.855 | 0.8575 | 0.0405 | 0.0464 | 0.0016 | 0.959 | 1.000 |
| SMFRPW6 | 1.044 | 1.0457 | 0.0689 | 0.0650 | 0.0047 | 0.932 | 1.000 |
| SMSSFPW6 | 1.240 | 1.2450 | 0.0718 | 0.0847 | 0.0051 | 0.959 | 1.000 |
| SMTHCPW6 | 1.183 | 1.1884 | 0.0691 | 0.0668 | 0.0047 | 0.959 | 1.000 |
| SMSTSPW6 | 1.375 | 1.3820 | 0.0707 | 0.0702 | 0.0050 | 0.959 | 1.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.618 | 0.6213 | 0.0987 | 0.0916 | 0.0096 | 0.959 | 1.000 |
| SMFRCW6 | 0.790 | 0.7956 | 0.0906 | 0.0934 | 0.0081 | 0.945 | 1.000 |
| SMSSFCW6 | 0.893 | 0.8909 | 0.1149 | 0.0990 | 0.0130 | 0.904 | 1.000 |
| SMLSCW6 | 1.219 | 1.2176 | 0.1027 | 0.1061 | 0.0104 | 0.959 | 1.000 |
| ME_AFFMN ON | | | | | | | |
| SCC | 0.288 | 0.2922 | 0.0883 | 0.0780 | 0.0077 | 0.918 | 0.973 |
| SCP | -0.128 | -0.1478 | 0.0832 | 0.0784 | 0.0072 | 0.932 | 0.507 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.055 | -0.0511 | 0.0596 | 0.0657 | 0.0035 | 0.973 | 0.082 |
| ME_AFFMNCW | 0.161 | 0.1495 | 0.0783 | 0.0805 | 0.0062 | 0.945 | 0.466 |
| ME_EISMNCW | -0.069 | -0.0672 | 0.0936 | 0.0802 | 0.0086 | 0.890 | 0.123 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Group G2** | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.4499 | 0.0434 | 9.4699 | 0.3044 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.4259 | 0.0453 | 8.9610 | 0.2632 | 1.000 | 0.000 |
| SMCEPW6 | 0.855 | 0.3860 | 0.0398 | 8.1324 | 0.2216 | 1.000 | 0.000 |
| SMFRPW6 | 1.044 | 0.4708 | 0.0447 | 9.9274 | 0.3305 | 1.000 | 0.000 |
| SMSSFPW6 | 1.240 | 0.5602 | 0.0579 | 11.8275 | 0.4655 | 1.000 | 0.000 |
| SMTHCPW6 | 1.183 | 0.5321 | 0.0505 | 11.1936 | 0.4261 | 1.000 | 0.000 |
| SMSTSPW6 | 1.375 | 0.6193 | 0.0577 | 13.0387 | 0.5744 | 1.000 | 0.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 0.5627 | 0.0791 | 12.3543 | 0.1974 | 1.000 | 0.000 |
| SMSSRCW6 | 0.618 | 0.3488 | 0.0441 | 7.5779 | 0.0744 | 1.000 | 0.000 |
| SMFRCW6 | 0.790 | 0.4456 | 0.0735 | 9.7242 | 0.1240 | 1.000 | 0.000 |
| SMSSFCW6 | 0.893 | 0.4961 | 0.0678 | 10.8472 | 0.1621 | 1.000 | 0.000 |
| SMLSCW6 | 1.219 | 0.6909 | 0.0900 | 15.1169 | 0.2869 | 1.000 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| SCC | -0.120 | -0.0674 | 0.0340 | 1.4394 | 0.0039 | 1.000 | 0.000 |
| SCP | 0.049 | 0.0205 | 0.0304 | 0.5986 | 0.0017 | 1.000 | 0.000 |
| ME_AFFMN ON | | | | | | | |
| PDMNCW6 | -0.375 | -0.3808 | 0.0515 | 0.0567 | 0.0026 | 0.973 | 1.000 |
| ME_AFFMNCW | -0.087 | -0.0901 | 0.0989 | 0.0871 | 0.0097 | 0.890 | 0.178 |
| ME_EISMNCW | 0.188 | 0.1773 | 0.0681 | 0.0744 | 0.0047 | 0.959 | 0.712 |

## Exploration Outcome:

MODEL RESULTS

| | Population | ESTIMATES Average | Std. Dev. | S. E. Average | M. S. E. | 95% Cover | % Sig Coeff |
|---|---|---|---|---|---|---|---|
| **Group G1** | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.9337 | 0.0873 | 0.0855 | 0.0076 | 0.952 | 1.000 |
| SMCEPW6 | 0.854 | 0.8483 | 0.0479 | 0.0467 | 0.0023 | 0.943 | 1.000 |
| SMFRPW6 | 1.047 | 1.0370 | 0.0614 | 0.0649 | 0.0038 | 0.962 | 1.000 |
| SMSSFPW6 | 1.238 | 1.2310 | 0.0918 | 0.0847 | 0.0084 | 0.914 | 1.000 |
| SMTHCPW6 | 1.184 | 1.1753 | 0.0752 | 0.0661 | 0.0057 | 0.914 | 1.000 |
| SMSTSPW6 | 1.377 | 1.3705 | 0.0777 | 0.0700 | 0.0060 | 0.943 | 1.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 1.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| SMSSRCW6 | 0.651 | 0.6407 | 0.0909 | 0.0952 | 0.0083 | 0.981 | 1.000 |
| SMFRCW6 | 0.797 | 0.7937 | 0.0936 | 0.0959 | 0.0087 | 0.962 | 1.000 |
| SMSSFCW6 | 0.941 | 0.9431 | 0.1031 | 0.1053 | 0.0105 | 0.952 | 1.000 |
| SMLSCW6 | 1.222 | 1.2089 | 0.1125 | 0.1085 | 0.0127 | 0.933 | 1.000 |
| ME_EISMN ON | | | | | | | |
| SCP | 0.225 | 0.2215 | 0.1032 | 0.0944 | 0.0106 | 0.933 | 0.638 |
| SCC | -0.041 | -0.0309 | 0.0911 | 0.0933 | 0.0083 | 0.971 | 0.057 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.032 | -0.0274 | 0.0774 | 0.0813 | 0.0059 | 0.933 | 0.048 |
| ME_AFFMNCW | -0.071 | -0.0715 | 0.0837 | 0.0798 | 0.0069 | 0.952 | 0.143 |
| ME_EISMNCW | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |
| PC_EDUC4PW | -0.095 | -0.0949 | 0.0369 | 0.0355 | 0.0014 | 0.924 | 0.771 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Group G2** | | | | | | | |
| SCP BY | | | | | | | |
| SMTSRPW6 | 1.000 | 0.5669 | 0.0768 | 12.4311 | 0.1934 | 1.000 | 0.000 |
| SMSSRPW6 | 0.937 | 0.5273 | 0.0754 | 11.5509 | 0.1735 | 1.000 | 0.000 |
| SMCEPW6 | 0.854 | 0.4820 | 0.0644 | 10.5683 | 0.1425 | 1.000 | 0.000 |
| SMFRPW6 | 1.047 | 0.5917 | 0.0822 | 12.9571 | 0.2140 | 1.000 | 0.000 |
| SMSSFPW6 | 1.238 | 0.6999 | 0.0934 | 15.3687 | 0.2982 | 1.000 | 0.000 |
| SMTHCPW6 | 1.184 | 0.6684 | 0.0889 | 14.6505 | 0.2736 | 1.000 | 0.000 |
| SMSTSPW6 | 1.377 | 0.7778 | 0.1036 | 17.0442 | 0.3697 | 1.000 | 0.000 |
| SCC BY | | | | | | | |
| SMTSRCW6 | 1.000 | 0.7538 | 0.1407 | 16.6736 | 0.0802 | 1.000 | 0.000 |
| SMSSRCW6 | 0.651 | 0.4915 | 0.1042 | 10.9319 | 0.0362 | 1.000 | 0.000 |
| SMFRCW6 | 0.797 | 0.5986 | 0.1269 | 13.2341 | 0.0553 | 1.000 | 0.000 |
| SMSSFCW6 | 0.941 | 0.7046 | 0.1271 | 15.6629 | 0.0719 | 1.000 | 0.000 |
| SMLSCW6 | 1.222 | 0.9167 | 0.1657 | 20.3289 | 0.1204 | 1.000 | 0.000 |
| ME_EISMN ON | | | | | | | |
| SCP | -0.112 | -0.0578 | 0.0461 | 1.3577 | 0.0050 | 1.000 | 0.000 |
| SCC | -0.158 | -0.1316 | 0.0682 | 2.8870 | 0.0053 | 0.981 | 0.000 |
| ME_EISMN ON | | | | | | | |
| PDMNCW6 | -0.256 | -0.2544 | 0.0691 | 0.0628 | 0.0047 | 0.962 | 0.971 |
| ME_AFFMNCW | -0.158 | -0.1516 | 0.1026 | 0.1028 | 0.0105 | 0.933 | 0.333 |
| ME_EISMNCW | 0.364 | 0.3571 | 0.0835 | 0.0859 | 0.0070 | 0.943 | 0.971 |
| PC_EDUC4PW | 0.000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.000 | 0.000 |

APPENDIX C

**Table 4.** *Intercorrelations of Study Variables for the Black subsample (n = 112)*

| **YR School Climate** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Discrimination | — | | | | | | | | | | | | | | | | | | |
| 2. Teacher relations | -.19* | — | | | | | | | | | | | | | | | | | |
| 3. Student relations | -.26** | .70** | — | | | | | | | | | | | | | | | | |
| 4. Fairness of rules | -.13 | .68** | .44** | — | | | | | | | | | | | | | | | |
| 5. School safety | -.08 | .76** | .60** | .47** | — | | | | | | | | | | | | | | |
| 6. Liking of school | -.12 | .66** | .50** | .63** | .60** | — | | | | | | | | | | | | | |
| **CR School Climate** | | | | | | | | | | | | | | | | | | | |
| 7. Teacher relations | .02 | .50** | .39** | .23* | .37** | .27** | — | | | | | | | | | | | | |
| 8. Student relations | -.12 | .52** | .44** | .42** | .43** | .26** | .48** | — | | | | | | | | | | | |
| 9. Clear expectations | .00 | .50** | .31** | .27** | .39** | .23* | .78** | .60** | — | | | | | | | | | | |
| 10. Fairness of rules | -.01 | .60** | .49** | .33** | .53** | .30** | .74** | .74** | .72** | — | | | | | | | | | |
| 11. School safety | -.02 | .64** | .47** | .33** | .52** | .30** | .71** | .74** | .87** | .80** | — | | | | | | | | |
| 12. Teacher-home | -.03 | .55** | .53** | .33** | .56** | .36** | .73** | .64** | .59** | .82** | .68** | — | | | | | | | |
| 13. School satisfaction | -.01 | .66** | .57** | .40** | .62** | .42** | .77** | .72** | .70** | .89** | .82** | .89** | — | | | | | | |
| **Ethnic-Racial Identity** | | | | | | | | | | | | | | | | | | | |
| 14. Exploration, W6 | .22* | .02 | .06 | .11 | -.09 | .08 | -.06 | -.13 | -.16 | -.11 | -.15 | -.11 | -.11 | — | | | | | |
| 15. Affirmation, W6 | .02 | .19* | .15 | .22* | .17 | .22* | .05 | .00 | -.04 | -.03 | -.03 | .02 | .01 | .64** | — | | | | |
| 16. Exploration, W8 | .00 | -.05 | -.04 | .05 | -.03 | -.15 | .09 | .16 | .10 | .18 | .10 | .06 | .07 | -.03 | -.03 | — | | | |
| 17. Affirmation, W8 | -.16 | .02 | -.07 | .10 | -.01 | -.05 | -.03 | .12 | .07 | .06 | .04 | -.02 | -.06 | -.01 | .09 | .65** | — | | |
| **Moderators** | | | | | | | | | | | | | | | | | | | |
| 18. Dyadic ERS[a] | .17 | .04 | .02 | .09 | .09 | .04 | .09 | -.00 | .04 | .01 | -.01 | .09 | .08 | .07 | .13 | -.03 | -.02 | — | |
| 19. School % Black | .11 | -.04 | -.11 | .07 | .03 | .17 | .05 | .09 | .06 | .10 | .08 | .02 | .11 | .09 | .08 | .08 | .02 | .00 | — |
| 20. School % Latinx | -.06 | -.06 | .07 | -.12 | .01 | -.13 | -.10 | -.06 | -.14 | -.12 | -.04 | .01 | -.04 | -.20* | -.11 | -.03 | .02 | .02 | -.62** |

*Note.* YR = youth report; CR = caregiver report; W6 = Wave 6; W8 = Wave 8.
Dyadic ERS: 1 = Low Dyadic Engagement, 2 = Justice Salient Advocates, 3 = Parent-Led, 4 = Child-Dominant, 5 = Multifaceted Dyadic Engagement
* $p < .05$, ** $p < .01$. [a] Spearman's rho is used.

APPENDIX D

**Table 5.** *Intercorrelations of Study Variables for the Latinx subsample (n = 145)*

| **YR School Climate** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Discrimination | — | | | | | | | | | | | | | | | | | | |
| 2. Teacher relations | -.07 | — | | | | | | | | | | | | | | | | | |
| 3. Student relations | -.05 | .52** | — | | | | | | | | | | | | | | | | |
| 4. Fairness of rules | -.13 | .71** | .29** | — | | | | | | | | | | | | | | | |
| 5. School safety | -.07 | .63** | .43** | .41** | — | | | | | | | | | | | | | | |
| 6. Liking of school | -.21* | .72** | .47** | .68** | .68** | — | | | | | | | | | | | | | |
| **CR School Climate** | | | | | | | | | | | | | | | | | | | |
| 7. Teacher relations | -.05 | .55** | .34** | .41** | .43** | .52** | — | | | | | | | | | | | | |
| 8. Student relations | -.03 | .56** | .35** | .42** | .42** | .50** | .62** | — | | | | | | | | | | | |
| 9. Clear expectations | .01 | .58** | .34** | .42** | .41** | .52** | .87** | .70** | — | | | | | | | | | | |
| 10. Fairness of rules | .02 | .59** | .32** | .46** | .44** | .52** | .80** | .82** | .81** | — | | | | | | | | | |
| 11. School safety | .02 | .58** | .38** | .33** | .41** | .47** | .77** | .72** | .90** | .78** | — | | | | | | | | |
| 12. Teacher-home | -.06 | .59** | .32** | .41** | .52** | .59** | .82** | .71** | .78** | .86** | .78** | — | | | | | | | |
| 13. School satisfaction | .01 | .62** | .33 | .43** | .50** | .58** | .88** | .76** | .83** | .90** | .83** | .93** | — | | | | | | |
| **Ethnic-Racial Identity** | | | | | | | | | | | | | | | | | | | |
| 14. Exploration, W6 | .20* | -.13 | .00 | -.16 | -.10 | -.09 | -.14 | -.04 | -.06 | -.06 | -.06 | -.10 | -.10 | — | | | | | |
| 15. Affirmation, W6 | .07 | .04 | .18* | .04 | .15 | .07 | -.03 | .01 | -.04 | -.05 | -.05 | -.02 | -.04 | .58** | — | | | | |
| 16. Exploration, W8 | -.09 | -.15 | -.08 | -.09 | -.11 | -.08 | -.04 | -.10 | -.10 | -.09 | -.08 | -.09 | -.11 | .18* | -.01 | — | | | |
| 17. Affirmation, W8 | -.25** | .03 | -.11 | .07 | .06 | .09 | .06 | -.05 | -.02 | -.04 | .00 | .04 | -.01 | .07 | .03 | .62** | — | | |
| **Moderators** | | | | | | | | | | | | | | | | | | | |
| 18. Dyadic ERS[a] | -.09 | .10 | .12 | .04 | .05 | .13 | .08 | .04 | .12 | .06 | .21* | .08 | .14 | .10 | -.04 | -.09 | -.02 | — | |
| 19. School % Black | -.01 | -.02 | -.12 | .03 | -.05 | .00 | -.05 | -.04 | -.02 | .02 | .00 | -.05 | .00 | .18* | .11 | .02 | .00 | .01 | — |
| 20. School % Latinx | -.01 | .03 | .11 | .03 | -.05 | -.01 | -.02 | .04 | .00 | .00 | .01 | .03 | .01 | -.11 | -.05 | .00 | -.09 | .13 | -.70** |

*Note.* YR = youth report; CR = caregiver report; W6 = Wave 6; W8 = Wave 8.
Dyadic ERS: 1 = Low Dyadic Engagement, 2 = Justice Salient Advocates, 3 = Parent-Led, 4 = Child-Dominant, 5 = Multifaceted Dyadic Engagement
* $p < .05$, ** $p < .01$. [a] Spearman's rho is used.