PARENTAL FACTOR INFLUENCES ON RACIAL SOCIALIZATION COMPETENCY AND CHILD BEHAVIOR IN BLACK FAMILIES: A STRUCTURAL EQUATION MODELING INQUIRY

By

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ABSTRACT

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Critical theories and analyses of history suggest that white supremacy and anti-Black racism have long shaped U.S. society and that they will likely persist long into the future. The lived effects of racism for Black people span psychological injury, family stress, and stress-related physiological consequences. Given this context, psychologists must dedicate resources to better understanding protective factors against these harmful social forces for those who are negatively affected. *Racial socialization* (RS) has been found to be a promising means of supporting Black family dynamics and serve as a protective factor for Black children and adolescents. Notably, many Black families enact some version of RS, but the literature suggests that *racial socialization competency* is a measurable skill and protective factor. Thus, in recent years, there has been a scholarship push toward characterizing, measuring, quantifying, and theorizing RS competency. This paper seeks to illuminate several factors operating within Black families (i.e., general life stress, parental racial discrimination stress, parental racial worry, child behavior problems) alongside several sub-types of RS Competency: Confidence, Skills, General Stress, and "Call to Action" Stress. Rating scales completed by 360 Black parents provided the data for this study. Prior to statistical modeling, several rating scales were examined for psychometric properties to inform which items would serve as indicators for latent variables in an SEM. Prior to understanding the relationships between constructs, a theoretically driven structural equation model was proposed, developed, and statistically tested. A simplified version

of the hypothesized model was identified as the best fitting model and was used to test hypotheses concerning the identified familial constructs. Many literature-based hypothesized relationships bore out in the data, with some notable exceptions. Racism-based distress for parents has a stronger predictive relationship to parental racial worry than does general life stress. Parental racial worry may serve as a motivating factor for RS Competency (RSC), rather than a hindrance. RSC Confidence is a stronger protective factor against child behavior problems than is RSC "Call to Action" Stress, but the difference is minor. Further, though stress-related subtypes of racial socialization competency do stem from some distress, they perform more similarly to strengths-focused racial socialization competency subtypes (i.e., confidence). This result supports the findings from previous research that find these subtypes of RSC to be distinct from one another while still strongly representing the overarching construct of racial socialization competency.

The information gleaned in this study can be used in many ways. First, several racism-related rating scales were examined for their underlying psychometric properties. Strengths and weaknesses were detected with this sample, suggesting some potential adjustments of these instruments. Further, the results from operating the full SEM could guide the development or revision of RSC interventions. Lastly, future researchers may consider that fostering positive racial socialization in settings outside the home may serve the dual purpose of reinforcing this protective factor for Black youth while reducing the stress or strain of engaging in RS at home for Black parents. Additional interpretations, implications, limitations, and future directions for research are discussed.

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Shriberg, Dr. Charles Barrett, Dr. Tiombe Kendrick-Dunn, Dr. Kisha Radliff, and *so* many more—thank you, thank you, thank you. Your kindness generosity, faith, mentorship, leadership, and fearless commitment to social justice and liberation allowed me to envision a space for myself in our field.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I: INTRODUCTION

As long as we have lived on this continent, Black parents have found themselves at the helm of raising their children in very different socio-political circumstances than those they were raised within. Where one generation was forcibly segregated from their White counterparts, the next fought for inclusion in White-normed spaces; their children in turn have fought for the right to wear their natural hair in the workplace, enforcement of anti-discrimination policies, and the right to assert their authentic selves in White-normed spaces. This process has been described as "'[B]lack folks' truth,' a collective wisdom of African Americans (Ward, 2000). Black scholars have spent over four decades working to describe and quantify the processes that Black parents follow to prepare their children for the racialized experiences they will endure as they come of age in the United States. One such scholar is racial identity pioneer Janie Ward. A selection from her 2000 text "The Skin We're In," reads as follows:

> "I wondered…if we, as African Americans, have lived up to the dream that the Little Rock children held so close as they mounted those steps. Have we done all that we can? What have we done wrong? Can we right in? What have we done right? Can we do it better? How can we best help our youth be strong, self-confident, and resilient? How can we fortify them to resist racism when they experience it firsthand and when they witness discrimination against others?" (p. ix)

This dissertation directly concerns the minutiae of these socialization processes, with diverse racial groups, it is called ethnic-racial socialization or cultural socialization, while the term racial socialization (RS) is reserved for research with Black populations (Hughes et al., 2006; Ruck et al., 2021). For the sake of clarity, "RS" will be used as shorthand for racial socialization practices. When, eventually, RS Competency is discussed as a highly related yet unique construct, it will be shortened to "RSC."

Historical Context

Racism is a global public health crisis—an emergency putting millions of Americans at risk (Bailey et al., 2017; Caughy et al., 2004; Devakumar et al., 2020; Heard-Garris et al., 2017; Pieterse et al., 2012; Trent et al., 2019). Scholars who have walked the path of studying Black psychology have been stating this plainly in the *implications* sections of their work for decades. Despite these calls to action, little has changed in psychology writ-large (Carter, 2007). Seen as a niche, monumental gains in the study of the psychology of Black Americans rarely make it into the "seminal literature," due to insidious and long-standing patterns of epistemic suppression (Dotson, 2012). Instead, the studies of ethnic minorities are often relegated to the margins of the field, segregated into their own Division of the American Psychological Association, professional association, and journals (Hartmann et al., 2013; Roberts et al., 2020, Buchanan et al., 2021). To set the stage for any empirical inquiry into the Black American experience at the familial level, a socio-cultural context to frame what led psychology to the point of investigating the influence of racism on this experience is warranted.

Why are scholars investigating racism and protective factors for Black Americans? Why is there a need? Black Americans have a unique positionality within the oppressive systems in the United States. A centuries-long legacy of dehumanization of Black peoples and commoditization of their bodies haunts the present in a pervasive manner that we as a nation are only beginning to fully address head-on (Hannah-Jones et al., 2019; Roberts & Rizzo, 2021). Chattel slavery as a worldwide institution that fueled American economic success was followed by a "freedom" that was not freedom at all. Black Americans were seen as less-than at best and lynched in the streets at worst. The separation of Black people (and other people of color) from white people was codified into federal law with the late 19th century *Plessy vs.*

Ferguson decision (Supreme Court of the United States, 1895). This ruling would limit progress for Black Americans for nearly 60 years, until the "Separate but Equal" standard for American institutions was struck down by the *Brown vs. Board of Education* decision amid the American Civil Rights movement (Supreme Court of the United States, 1953). The Civil Rights Act of 1964 was designed to speed the progress of reducing and eliminating systemic racism in the United States (Civil Rights Act, 1964). Yet, sixty years post-*Brown* and fifty years post-Civil Rights Movement, Black people in the United States still face systemic racism, individual racism, and everyday slights that remind us of the centuries of historic insults (Roberts & Rizzo, 2021). Further, the field of psychology itself and its governing institutions have contributed to the oppression and subjugation of Black, Indigenous, and People of Color (BIPOC) in the United States (American Psychological Association, 2021; Cummings Center for the History of Psychology, 2021; The Association of Black Psychologists, 2021).

Although these events took place in what seems to be a distant time ago to those born in the 21st century, racism is still present, and always will be (Bell, 1992) unless society as a whole commits itself to anti-racist action. Further, past racist-incident-based injuries have insidious ways of trickling down in families and communities in a phenomenon known as intergenerational trauma (Larez et al., 2022; O'Neil et al., 2018). Intergenerational trauma, like so many psychological constructs, has multifactorial etiology stemming from both biological and social factors. Many have posited that physical stress can change the body through phenotypical changes or stress processes (Aroke et al., 2019; Dupont et al., 2009; Williams et al., 2016). Others have found evidence for social processes such as child-rearing and family systems theory (Abrams, 1999; Fitzgerald et al., 2020). Regardless of pathway, it is clear through the literature

and anecdotal accounts from oppressed communities: oppression leaves a mark through pathways of racial stress and trauma (Carter, 2007; Pieterse et al., 2013).

Given the prevalence of intergenerational trauma, racial stress, and individual racist-incident-based trauma, it is critical that Black individuals have access to supports and interventions to allow them to cope in adaptive ways that they can then pass on to their children. Family Stress Model literature contends that when parents are stressed—be it general or racial—change processes occur in the family unit (Anderson & Stevenson, 2019a; Cappa et al., 2011; Masarik & Conger, 2017; McLoyd, 2014; Visconti et al., 2002). More specifically, Masarik and Conger (2017) postulate that distress contributes to parental psychological distress, which in turn effects disrupted parenting; then, the downstream effects of these three constructs contribute to child and adolescent adjustment problems. Indeed, when exposed to severe parental stress, children have been shown to exhibit higher rates or intensity of externalizing symptoms (Williford et al., 2007). There is also evidence that children model the stress responses they witness in their parents (Visconti et al., 2002). Again, regardless of the specific pathway, there is evidence that interventions and supports are warranted. Evidence from across child, family, clinical, and developmental psychology support providing parent- and family-oriented support to foster optimal conditions for child development.

Historical Trends in the Psychological Study of Racism-related Constructs

Historically, psychological research has been conducted with Black participants underrepresented or not represented at all (Guthrie, 2004; Henrich et al., 2010). And, more recently, most research is conducted and written by white scholars and reviewed and edited by white scholars (Baffoe et al., 2014; Roberts et al., 2020). Even when it comes to studies about race—which have been rare—the empirical body of research is largely shaped, edited, and

disseminated by and for white audiences (Roberts et al., 2020). Thus, over decades, the pattern emerges that perspectives of color are marginalized through epistemic exclusion (Dotson, 2012). As such, the empirical epistemology of psychology has been rooted in the implicit or explicit understanding that research that begins with white perspectives is the correct starting point.

Further, it is fact that economic advances in the United States were built on the backs of Black, brown, and other peoples of color (e.g., chattel slavery, Chinese labor on the transcontinental railroad, fluid racialization that maintains a racialized underclass; Robinson, 2020; Williams, 2021). Threads of this belief, that Black pain is not only expected, but perhaps necessary, for the interests of this country to advance are still present in the 21st century (Muhammad, 2019). Even the best-intentioned psychologist may still possess implicit biases that arise from U.S. socialization (Eberhardt, 2019). As such, the psychological distress of racism and historical trauma in Black communities has been historically underestimated and has gone unaddressed.

Racial Stress

The devastating impact of all forms of racism on the economic mobility, physical and mental health, and family and child outcomes for African Americans is well-documented in both the cultural memory of Black people, as well as in the body of research literature on these topics (Aroke et al., 2019; Grossi, 2020; Trent et al., 2019). The psychological and behavioral consequences of racism, collectively known as racial stress, are insidious in that they are widely experienced and have rarely been sufficiently addressed. Within the last several decades, psychological researchers have sought to identify, comprehend, and respond to issues of racial stress in order to improve short- and long-term outcomes for people of color, particularly those of African descent. When left unaddressed, racial stress can transform and evolve into individual

or intergenerational racial trauma. Understanding the nature of racism, and in turn racial stress, is an important first step to supporting Black children and families in the U.S. as they face well-documented inequities.

Although families are the milieu wherein transmission of intergenerational stress is presumed to occur (Fitzgerald et al., 2020; Friend, 2012), the prevalent research in the literature focuses on adults instead of children or family units (Pieterse et al., 2012). Despite this pattern, there exists empirical evidence that children of color experience racial stress frequently (Byrd & Carter Andrews, 2016; Jernigan & Henderson Daniel, 2011) and that the distress associated with racism can influence family dynamics (Anderson et al., 2018a; 2018b). Landrine and Klonoff (1996) found that experiences with racist events were correlated with heightened psychiatric and behavioral symptoms in adults; that their small sample (N=153) yielded such large effect sizes across a host of psychiatric concerns (e.g., depression, anxiety, smoking) speaks to the relationship between racist experiences and health challenges. An extrapolation of this research leads us to the question of how Black families manage potential stress from discriminatory events.

Resilience and Racial Socialization

Research in protective factors against racial stress leads to a discussion of *racial socialization (RS)*, or the practices parents engage in to prepare their children for racialized experiences. RS has been found to be an effective coping practice that is passed from parent to child in many families of color, particularly Black families. RS is defined as the education and preparation that Black parents provide about the nature of Blackness in the U.S. and is analyzed via the statements about Blackness transmitted to children (Hughes et al., 2006; Stevenson et al., 2001). Further, early researchers in this topic area had a less robust foundation to work from and

often employed critical, qualitative, and mixed methods to uncover mechanisms of racial socialization for children and adolescents (Ward, 1995, 1996). For example, Ward (1995) posited that protective factors that already exist within the Black community (e.g., traditions of care-giving, religiosity and spirituality, communalistic orientations) could serve as guidelines for the adults (e.g., parents, caretakers, teachers) entrusted with supporting Black youth and adolescents as they develop. Two and a half decades later, we are still pursuing answers to questions in this critically important scholarship space.

Statements reflecting the practical realities of negotiating systemic racism and those engendering positive regard for Black identity have been found to be the most effective buffers against racial stress, and therefore long-term protection against the development of racial trauma (Anderson et al., 2018c). Indeed, this research echoes the messages found within Ward's (1989, 1995, 2000) work, which has emphasized the importance of "truth telling" alongside nurturing learning environments for optimizing Black girls' academic and social-emotional outcomes. The body of RS literature has dived deep into Black parents' experiences as well as those of their children. Not surprisingly, Black parents with high levels of both racial stress and pride about their race are more likely to engage in RS (Thomas et al., 2010).

While previous research on RS is robust, its focus has been on measuring types of RS parents employ or the frequency by which they engage in RS. A deep look into which specific aspects of RS drive the positive outcome was warranted. A critical new thread of this research has emerged in recent years. Exploring this thread—racial socialization *competency*—allows researchers and clinicians alike to understand the aspects of RS that contribute most directly to the positive outcomes in children with which "successful" RS is associated (Anderson et al., 2020). In short, racial socialization competency can be operationally defined as an umbrella

under which the measurable components of racial socialization that drive coping, resilience, and protection from racism-related harms exist. Skills, confidence, and stress have been proposed and tested as these underlying components (Anderson et al., 2020).

Prior research demonstrates a relation between experiencing race-related stress and RS, but it does not explore the critical link between the level of racial stress parents perceive and how it influences their racial socialization parenting practice and competency, and in turn the outcomes for children. To investigate the nuanced role of RS for Black families and children, scholars have sought to capture the processes in controlled interventions. One such intervention is the Engaging, Managing, and Bonding through Race (EMBRace) Program, a 5-session intervention for Black parents and children to develop RS competency, awareness of racial dynamics, and broadly applicable coping skills. Several studies have demonstrated the importance of RS in child development and adjustment (Anderson et al., 2017; Anderson et al., 2018a; Caughy et al., 2002; Stevenson, 1995), as well as the early evidence of the positive influence of EMBRace itself (Anderson et al., 2018b [case study]; Anderson et al., 2018c [small effect size]). The present study exists in part to continue to explore the constructs of cognitive and behavioral parental factors like stress and worry, the way they may relate to parents' racial socialization competency, ultimately influencing child outcomes.

This study aimed to explore the influence of parents' perceptions of stress on their racial socialization competency and how those efforts might influence the behaviors of their children. Specifically, the three factors that serve as underlying components of RS competency, confidence, skills, and stress, were examined (Anderson et al., 2020). A theoretical framework is outlined in the Methods chapter to describe how these questions might be answered.

Study Purpose

The purpose of the present study is to explore the relations among internal and external parental factors, racial socialization competency, and child outcomes using statistical modeling. This study examined the ways in which the four primary components of RS competency (i.e., confidence, skills, stress-general, stress-call to action; Anderson et al., 2020) contribute to child outcomes, considering the downstream effects of general and racial discrimination stress and worry on these variables. Gaining a deeper understanding of the way these constructs statistically interact with one another may provide important insight on how to better support parents on their journey to RS competency, with an end goal of better supporting their child.

Study Aims

This study explores the influence of several parent factors on child outcomes within an overarching structural equation model (SEM). The following aims of the research are listed in order from initial predictor variables to the final outcome variables, though the analyses are simultaneous. Firstly, this study examined the influences of general stress and racial stress on levels of worry a parent may have about racialized experiences for their children. In the proposed study, both general stress and racism-related stress were modeled to: (a) determine if they contribute different levels of variance to the model and (b) if so, if that difference is statistically significant. The proposed model also sought to examine differential unique variance contributions from parental racial worry to four underlying constructs of RS competency: skills, competency, stress-general, and stress-call to action. Lastly, this study sought to examine the relations between these constructs underlying RS competency with child behavior problems. It is the hope that the results of this study will help shed light on several complex systems at play in Black families, specifically regarding racial socialization competency as a protective factor.

Further, the results of this study will contribute to the research informing RS interventions for Black families.

Research Question 1

Does the a priori theorized model supported produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?

Research Question 2

Within the SEM model, are self-reported parent stressors—both general and racialized—related to self-reported racial worry for their children?

Research Question 3

Within the SEM model, does self-reported parental racial worry significantly influence the self-reported racial socialization competency of Black parents?

Research Question 4

Within the SEM model, are each of the four constructs of self-reported racial socialization competency significantly associated with parent-reported child behavior outcomes?

Author Positionality

> "There is an assumption that taking a stand represents an abdication of scientific objectivity, but this assumption confuses bias with objectivity. The fact that something is biased does not necessarily mean it is subjective; bias can be the consequence of interests, more or less conscious, but it can also be the result of an ethical choice." (Ignacio Martín-Baró, 1994, p. 29)

Statements of positionality are rarer in psychology than in education. My blended training in psychology and education led me to this eclectic style of scholarship and writing. I believe in the power of sophisticated quantitative approaches, but I also hold post-positivism to

task and would never dream of assuming I am absent from the science I craft. Even though our publication manual dictates third person and dispassionate writing, that is *just the writing*. Prior to that, we bring our worldviews, assumptions, passions, and flaws into the process of generating research questions and hypotheses, deciding on methods and software. Our work is influenced by who we are, what we do, why we do it, and who we do it for. Thus, I provide this statement of positionality as an exercise in reflexivity and disclosure.

I am a mental health practitioner. Of the many roles I am obligated to fill as a doctoral student, *this* role is the most important to me and most salient. When I wake up in the morning, it is not to serve as a research assistant or to contribute my time to academic service. I wake up every morning for the children I serve, and, my passions are not only shaped by the ethics of my field. Long before my practices were specified by the rules developed by my field's governing bodies, I was dedicating my life to doing good work for youth. To my core, this is who I am.

Because I cannot remove myself from the research I want to conduct, I brought my long-standing ethic of care, personal politic of radical equity, and the professional ethics of health service psychology to the table when planning my dissertation. In my work as a school psychology trainee and mental health practitioner, I have witnessed pain and discomfort in the children of color that I have served and observed in schools. I have witnessed racial disproportionality in discipline, academic achievement, assessment scores, and special education referrals in both the literature and the field. I know that many children and youth of color *know* that they are being treated unfairly, but sometimes lack the language, tools, or power to do much about it, all of which is developmentally appropriate, but nevertheless, heartbreaking. They might not be able to quite put their finger on it, but they know something feels "off" about their experiences with racism and other, intersecting oppressions. Such knowledge and

experiences can bear psychological weight that goes unaddressed by educators and mental health providers alike. Youth are inherently powerful, and so this all-too-common powerlessness in the face of racism moves me to act.

My desire to shine a light on and understand the psychological distress that youth of color experience is two-fold. This drive is both a mission born from my own experiences with racism as a child, and from the beneficence I am sworn to uphold as a mental health provider. My practitioner lens also informs the endgame of my research: enhancing and developing interventions that can make a positive difference in the lives of the youth affected by intersectional oppressive forces and the circumstances those forces create. It is my aim that we can use this study to further investigate the theoretical model on which one such treatment is based. Simultaneously, I am aware that applied applications are usually several steps removed from such narrow, quantitative methods. One aim of my research is to shrink that gap, so that interventions related to racism have the most direct benefit from this research as possible. The inclusion of critical frameworks and theories (e.g., QuantCrit, Gillborn et al., 2018) will aid this project in reaching these ambitious aims.

I bring a lot of "baggage" to work situated in social and racial justice. This weight has accumulated over the years, as my various identities—both marginalized and overpowered—have intersected with systems of privilege and oppression. Formal education overlays with personal experience, allowing me a deeply personal experience with concepts like multiplicity of identity and the intersectionality faced by minoritized persons. As these concepts relate to the proposed study, I shared my Black identity as well as my own racial identity development journey with the participants that often participate in racism-based trauma research. I am a Black woman, albeit without a family or children of my own. But I did grow up with a Black family,

the child of two Black parents. I share American Blackness with my participants. I also know that I may bring several differences to my work with other Black people. From my training in clinical psychology, I learned that I must listen first to the parents I aim to support before ever imposing my own views; while doing research for Black parents, I hold these same truths.

Lastly, I grew up in an upper-class family. I have spent my entire adulthood trying to reconcile my financially privileged upbringing with my Blackness. My conclusion is that each of us is comprised of privileged and oppressed identities which come together and intersect with specific systems of privilege and oppression. I am by no means done processing my disparate identities, but I do firmly believe in using my privilege to make change whenever I can. I have gotten quite good at navigating white-normed spaces, and I use those skills to advocate for the causes of people of color *often*, even when applying those skills invites risk of disapproval or contempt. This is not a perceived obligation I ever voice aloud but given how much of my career it has motivated, it is important for me to include it here.

Dissertation Structure: The Road Ahead

Chapter II: Review of Literature

The second chapter in this dissertation is the review of literature, wherein background literature in psychological theories, critical race theories, and racial socialization is covered in depth. Supplemental information is provided on racialized stress, parent interventions, and family dynamics to provide more context for the research questions. Specifically, it opens by *centering* racism-based psychological distress as the overarching problem addressed by this study and others in this topic area. Further, the history of psychology's contribution as a field to the maintenance of white supremacy and other hegemonic systems is outlined from the

beginning, as it serves as important context for why racialized topics have been sidelined in the field.

In this chapter, the reader can expect the information outlined above to unfold in the following order:

1. Theoretical Perspectives and Frameworks (e.g., Critical Race Theory, Racial Encounter Coping and Appraisal Stress Theory)
2. Background on racism and its lived effects (e.g., racism-related stress, intergenerational trauma)
3. Stress, parenting, and the effects on child and family functioning
4. Racial socialization, racial socialization *competency*, and racial socialization interventions (i.e., EMBRace)

Essentially, the literature that informed this study's theorized SEM model is reviewed and examined.

Chapter III: Method

In this dissertation, the Method chapter covers significant ground, including some preliminary results. In this chapter, SEM, a method that allows for the quantification of behavior, is introduced as the primary method. In other words, SEM utilizes quantitative data, in this case, rating scale responses from Black parents, to calculate relationships between variables that represent the construct captured in these responses (Bollen & Noble, 2011). The data source, participants (N=361, analytic sample N=360), and descriptive statistics are outlined in the first third of the chapter to contextualize the sample. Because this SEM is formed of entirely latent variables, the rating scales used in the model and the process of choosing which items served as indicators for latent variables are discussed in detail. The second *major* section of Chapter III

outlines the steps taken to prepare for the modeling of the four research questions. In this section, the proposed model structure is introduced. The preliminary data analyses required to finalize a workable SEM with acceptable model fit (e.g., EFAs, reliability analyses, CFAs) are outlined in this middle section of Chapter III. The last section of this chapter introduces the hypotheses that accompany each research question along with empirically-grounded rationale.

Chapter IV: Results

This chapter carefully outlines the *analytic approach*, or the steps taken to construct a workable SEM that could be used to answer research questions two through four. While research question 1 concerns model construction, the other three address the relations outlined within the model. In this chapter, three models are discussed in order of development. The reader is walked through the procedures taken to arrive at the final model. Lastly, data from the study is fitted to each relevant hypothesis to declare whether predictions bore out in the data or if unexpecting findings arose.

Chapter V: Discussion

In Chapter V, the reader is reminded of the stakes of researching resiliency factors and supports for Black families and the overarching context of white supremacy, anti-Black racism, and intersecting oppressions. CRT and QuantCrit are briefly reviewed as interpretive frameworks for the data and research questions outlined in this study. This chapter briefly reproduces results organized around each hypothesis, with the important inclusion of interpretation, revisiting the literature and reflecting on unexpected findings. This chapter concludes with limitations, future directions, practical implications, and a conclusion that summarizes what these findings mean and why this study was so worthwhile.

CHAPTER II: REVIEW OF LITERATURE

Introduction

The stress of racism manifests in many ways, including within the emotional and behavioral domains which psychologists have sought to understand. Within psychology, the determinants of racism in psychological and developmental inequities were first studied by comparing outcomes between Black and White samples (Adams & Salter, 2011). For example, a classic study found that 72% of race-related social science research that studied Black samples utilized a white-comparison group structure (Graham, 1992). A study design that requires a white comparison group to answer its research questions is not effectively investigating the experience of the population of color in question, as it emphasizes exploring between-group differences while erasing important opportunities to examine within-group differences (Weaver et al., 2015). Further, these comparison studies fail to illuminate important within-group differences among Black communities (Weaver et al., 2015). As time went on, and critical and culturally-specific theories gained traction, psychologists developed models, theories, and frameworks designed specifically for Black individuals, and the *gold standard* of the white comparison group began to dwindle (Cauce et al., 1998; Whitfield et al., 2008). At present, there is a robust body of scholarly work that explores the role of racism in the Black individual, Black families, and majority-Black communities and schools. The research on parenting and the family unit in particular have helped illuminate the role of racism in child development and have helped inform the development of interventions for interpersonal challenges that arise. This legacy of scholarship serves as the foundation of the proposed study and is reviewed in detail in this chapter. Prior to that deep dive, an exploration of the theories that guide much of the critical scholarship on race as well as recent research on racial stress appraisal must be introduced, as

these frameworks guided the conceptualization and planning of the present study heavily influenced data analysis and reporting.

Theoretical Perspectives and Frameworks

Inquiry Worldview

Inquiry worldview is not a universally used term but is similar in scope to the concept of a research paradigm. DeCuir-Gunby and Schutz (2017) describe an inquiry worldview as a description of one's "current overarching beliefs regarding how you see, understand, and interpret how research investigation works" (p. 18). Their description is an umbrella term that encompasses ontological stances and epistemological assumptions about the world. In their opinion it is critical to evaluate one's inquiry worldview because these beliefs explicitly and implicitly inform or even guide every aspect of your study.

Traditional psychological science positions itself as a positivist or post-positivist discipline, wherein researchers seek to understand the *true nature* of human cognition, emotion, and behavior (Teo, 2018). A quantitatively dominant science, psychology aligned itself with hard sciences early on (Goodwin, 2015; Martín-Baró, 1994). Early psychologists adopted the scientific method as it was applied in the sciences that came before it (e.g., physics, chemistry) and used that idea to test hypotheses and theories meant to predict how humans behave in various situations (Goodwin, 2015; Teo, 2018). This approach allowed for psychology to gain legitimacy as a social science but resulted in the stripping of individual difference from much cognitive and behavioral theory (Hedge et al., 2018). At present, we are left with a science that often falsely believes researchers are "positionless observers" utilizing "objective" methods to conduct their research without consideration for identity-based bias or outside influence (Adams & Salter, 2011, p. 1362). What remains is a science that does not critically interrogate the

systems of oppression and privilege that heavily influence human experiences and behavior situated in a discipline comprised of scientists who do not critically evaluate themselves and what they bring to their work (Salter & Adams, 2013; Salter & Haugen, 2017). I provide this brief lesson in the history of psychology because I aim to avoid many of these pitfalls as I conduct my research.

My inquiry worldview can be described as *Critical Constructivist-Interpretivist*. I firmly believe that in this world, there are multiple truths and realities to be found in any given situation (DeCuir-Gunby & Schutz, 2017). Researchers who utilize this inquiry worldview believe that people's perceptions and interpretations of situations are guided by their life experiences. This approach also recommends against broadly generalizing research findings beyond the specific or local contexts that were studied. This inquiry worldview guides research toward qualitative-dominant mixed-methods designs (DeCuir-Gunby & Schutz, 2017). In lieu of that option due to contextual limitations, the present study is a quantitative study guided by critical theory.

Theories

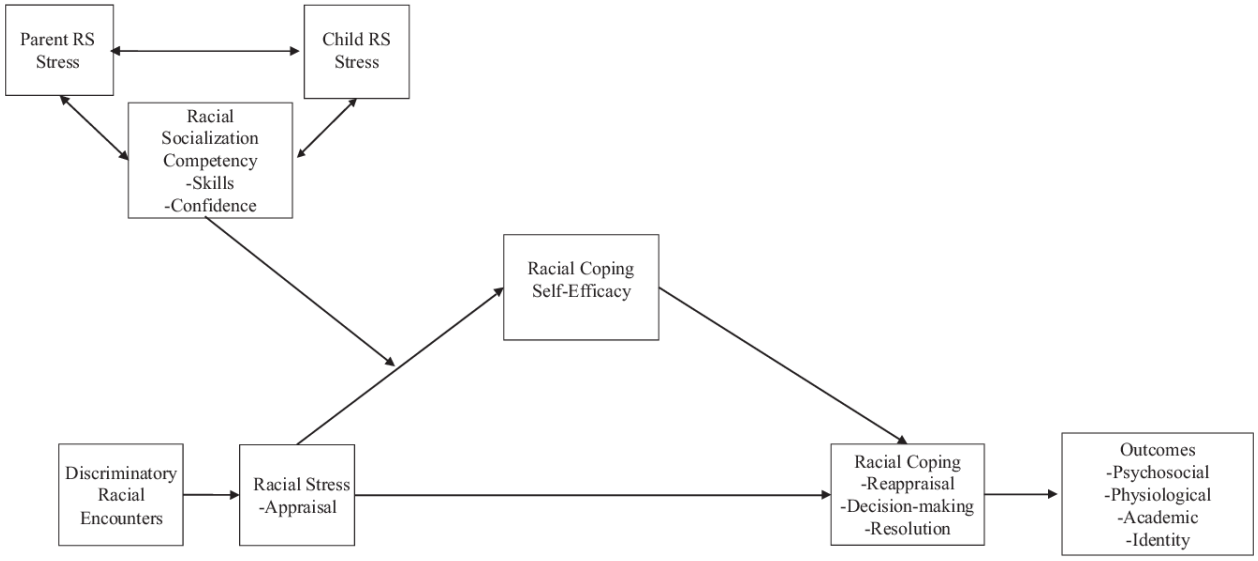
The proposed study was guided by several interlocking theories, theoretical perspectives, and theoretical frameworks. Select tenets of Critical Race Theory guided the decision-making surrounding the chosen subject, specific variables, and overall purpose for inquiry. Further, it was utilized as an interpretive framework for results of the proposed study. This study aims to test several underlying concepts within the racial encounter coping appraisal and socialization theory (RECAST) model put forth by Anderson and Stevenson (2019). Lastly, a set of principles designed to guide quantitative researchers toward more critical science, QuantCrit, were used to ensure that this study avoids aspects of quantitative science that reinforce systems of oppression, namely erroneous interpretations of data and acritical study design (Crawford et al., 2019;

principles outlined below). Together, these theories serve as the foundation of the study and justification for the chosen research questions.

Racial Encounter Coping Appraisal and Socialization Theory (RECAST). Scholars hope to use RECAST to elucidate the relations between racial stress and discriminatory racial encounters (DREs) within the Black family unit. In this update to the 2014 theory proposed in Stevenson's *Promoting Racial Literacy in the Schools*, Anderson and Stevenson (2019) propose that *racial socialization competency* can moderate the relation between racial stress and self-actualization. Such moderation paves the way for coping and well-being. Initially, Stevenson (2014) proposed RECAST as a lens through which to view how children and families perceive, process, and act following DREs. RECAST is a racially specific adaptation of the transactional model of stress and coping (TMSC; Lazarus & Folkman, 1984). By utilizing RECAST and acknowledging the critical role of RS in reducing stress following DREs in individuals of color, one could posit the influence of fostering RS competency as a strengths-based intervention for racial stress and coping following instances of racial discrimination (Anderson & Stevenson, 2019a). RECAST relies heavily on the acquisition of racial literacy skills:

> "*Racial literacy* is the ability to accurately read (e.g., decode, interpret, appraise), recast (e.g., reappraise or rewrite stereotyped narratives), and resolve (e.g., engage in healthy decision making) the language of racially stressful encounters."
>
> (Stevenson, 2014, as cited in Anderson and Stevenson, 2019a)

Figure 1. The moderating role of racial socialization in stress, self-efficacy, and coping processes through the Racial Encounter Coping Appraisal and Socialization Theory (RECAST)



Note: RS = racial socialization

The foundational psychological assumptions of the proposed study can be explained via RECAST (Figure 1). DREs can result in racial stress once they are appraised as a racial threat by a Black parent. According to the RECAST model, this encounter sets off a series of internal processes that rely on high levels of RS competency and feelings of racial coping self-efficacy. As Black parents and children move through the stages of this model, they eventually reach a place where they can reappraise the experience. This reappraisal stage can lead to positive racial outcomes if they are proficient in racial literacy and experience racial coping self-efficacy. These positive outcomes can be maximized by an RS intervention. Though the use of process models is important for developing hypotheses for specific relations among constructs within a family unit, an overarching critical framework to contextualize the Black family within wider society is a crucial inclusion to the proposed study.

A critical aspect of this model is the proposed moderating influence of RS competency. This model posits that the familial processes related to the acquisition of RS competency include the development of skills and confidence related to RS as well as successful management of the stress that can arise for both parents and children during the RS process. The present study seeks to account for all variables represented by the relationships between Parent RS stress, Child RS stress, and RS competency of the RECAST model.

Critical Race Theory. Critical Race Theory (CRT) is a critical intellectual movement that emerged from legal scholarship during the 20th century (Delgado & Stefancic, 2017). Black legal scholars such as Kimberlé Crenshaw and Derrick Bell began developing this theoretical framework in response to the lack of attention given to historical structures of racism and oppression in critical legal studies (Crenshaw et al., 1995). Further, the dominant paradigm of whiteness is viewed as the default or standard in the United States context. This norm permeates most settings and contexts, including law and education, two fields that were early adopters of CRT. Ladson-Billings (1998), an educational scholar and co-author of seminal work on CRT in education, shares the following:

> "It is because of the meaning and value imputed to Whiteness that CRT becomes an important intellectual and social tool for deconstruction, reconstruction, and construction: deconstruction of oppressive structures and discourses, reconstruction of human agency, and construction of equitable and socially just relations of power." (p. 9)

CRT is a guiding framework for research investigating the role of racism in people's lives, particularly through the tenets espoused by Ladson-Billings and Tate (1995):

1. Conception of racism as a systemic force embedded in the enduring structure of society (Bell, 1992)

2. Discourses of neoliberal individualism act as tools for laundering, White-washing, or otherwise obscuring evidence of racism in American society (Brown et al., 2003)
3. Broad support for civil rights and racial justice emerges only when it aligns with the interests of White Americans (e.g., Bell, 1980)
4. White identity (and its cultural manifestations) is a profitable possession that brings benefits to the bearer (e.g., Harris, 1995)
5. An emphasis on counter-storytelling as a tool for revealing and resisting the racialized bases of society and everyday experience (e.g., Delgado, 2000)
6. Minoritized groups and individuals should be viewed and treated not as a monolith, but with intersectionality & antiessentialism (Crenshaw, 1990)

Critical Race Theory is a fitting guiding framework for research investigating the role of racism in the workings of the Black family unit for several reasons. First, its racial realism approach allows for a transparent consideration of ecological factors that overlay the experiences of Black families in the U.S., regardless of ethnicity or specific cultural factors. Also, as a framework, it allows for researchers to consider the impact the research itself will have on Black individuals, therefore guiding scholars down a path that resists reproduction of white supremacist norms and assumptions; such a path therefore emphasizes the importance of research about Black people that benefits and highlights the stories of Black people. Additionally, the sixth tenet reproduced above encourages scholars to view their populations of study with an anti-essentialist lens which recognizes that holding multiple minoritized identities often leads to an intersectionality of oppressive experiences (Crenshaw, 1990). The challenges faced by a Black man and the challenges faced by a White woman may each be shaped by their experiences with minoritization: Blackness encounters racism and womanhood encounters sexism and

heteropatriarchy. These two experiences though, are distinct from a Black woman's experiences with oppression, termed misogynoir by Dr. Moya Bailey, or a blend of racism and sexism unique experienced by Black women (Bailey & Trudy, 2018). This particular form of intersectionality is important to name and actively consider in the present study given the heavily female (> 70%) and 100% Black sample.

The mission of this framework is nearly ubiquitous in the breadth of its associated scholarship. By studying the body of work that supports CRT, scholars can pinpoint tenets and principles that best align with their work and the aims of their research and use that specificity to build strong empirical or exploratory investigations. The specific tenets of CRT that guided this study are outlined below in the *Alignment of Theory to Method*, section. In this study, CRT was used in identifying the topic of study and a source of data. In this case, the permanence of racism provided the urgent need for study in this topic area. Further, the transparent communication around the collection, cleaning, and management of the dataset, which featured 100% Black participants. Further, the author acknowledges that much research in psychology featuring people of color has fallen short of examining within-group differences. By pursuing supplemental analyses to identify potential differences in the model along lines of parent and child gender, this study aims to highlight anti-essentialism in psychological research. Lastly, though it is a guiding framework, it is not a perfect fit for the chosen methodology of the study, which is quantitative. While recent headway has been made in the psychological sciences to incorporate CRT (see PsyCrit, Crossing et al., 2022), such frameworks were unavailable at the time of study development. Thus, to supplement the tenets that guided study development, the author proposed a variant of CRT as a supplement: *QuantCrit*.

QuantCrit. Developed by Gillborn and colleagues (2018), QuantCrit calls upon quantitative researchers to resist the common misuses, misapplications, or misinterpretations of quantitative methods to reinforce a status quo of white supremacy. For example, QuantCrit scholars describe the misuse of false racial violence statistics to support racist and untrue claims about Black Americans by a political figure (Crawford et al., 2019). The scholars that pioneered this work hoped to provide a roadmap to a "critical, race-conscious use of statistics" (Crawford et al., 2019, p. 126). As outlined by Gillborn et al. (2019), the guiding principles of QuantCrit are as follows:

1. *Racism central to society.* Further, it is at once, fluid, complex, yet rigid and permanent. Without critical, race-conscious statistics, scientists are at risk of automatically reproducing patterns of racism, white supremacy, and anti-Blackness.
2. *"Numbers are not neutral.*" QuantCrit problematizes the ways in which quantitative data are often falsely labeled as unbiased data to support various opinions and beliefs (Crawford et al., 2019, pg. 126).
3. *The categories that we use in quantitative research are contrived*. We must not assume that the labels we have created to describe constructs—particularly race and racism—have inherent, rigid meaning. Further, researchers must not divorce the categories they choose from the historical context that surrounds them.
4. *"Data cannot 'speak for itself.'"* Data can be open to multiple interpretations, and those interpretations depend on many factors including the positionality and inquiry worldview of the authors and the context of the human beings that generated the data in question (Crawford et al., 2019, 127).

5. In keeping with social justice alignment, *QuantCrit "rejects false…notions of statistical research as value-free"* (Crawford et al., 2019).

The present study is committed to all five proposed principles of QuantCrit to fulfill the author's desire to conduct racially-just quantitative science. First, as mentioned when describing the role of CRT in this study, racism as a central, permanent construct of United States society is a driving factor for the urgency of research into protective factors of racism-related harms. Second, the context under which these data were collected, and the lived experiences of Black families, was kept in mind at each stage of study planning and empirical work. Third, the constructs represented in this statistical modeling project are just that: *constructs*. Factors such as measurement artifacts, face validity, and participant fatigue may all have contributed some error to the data. These are some reasons that in the social sciences, the results of our research must be interpreted with a healthy dose of humility and caution. Lastly, the research interpretations put forth in this dissertation are formed on the foundation of select literature and theory; thus, it is acknowledged that multiple interpretations of statistical research are possible.

Alignment of Theory to Method

The outlined theories are present throughout various aspects of the present study. First, this is an identity-conscious study, wherein bias and positionality were considered in advance of planning the study itself (Creswell & Poth, 2018; Marshall & Rossman, 2015). Additionally, several tenets of CRT underlie the present study. This study acknowledges that racism is endemic to US society; this tenet of Critical Race Theory is part of the justification for studying racism to inform intervention (Bell, 1992; Delgado & Stefancic, 2017). The permanence of racism requires that psychologists provide supports for Black Americans to navigate this society equipped with protective factors that can buffer against systems of oppression. While committed

to elevating the voices of Black people, this study does not allow for the storytelling and chronicling that is acceptable according to CRT's standards. (Delgado, 1990). Thus, the commitment to capturing voice in this quantitative study specifically is better in line with QuantCrit than it is with CRT (Crawford et al., 2019). In other words, this study presumes that the data does not speak for itself and rather, the researcher must be sure to ground the knowledge and insight gained from quantitative data in the lived experience of Black people (Crawford et al., 2019). Despite these limitations, CRT factored heavily into the data interpretation, implications, and recommendations for future research sections of this manuscript in an effort to elevate voices through quantitative means (Martín-Baró, 1994). Additionally, this author is aware, not only due to individual positionality, but also to personal commitment to social justice ideals, that Black America is not a one-dimensional, essentialized cultural body, but rather an ever-shifting, vibrant, and internally diverse corps within our Nation's fabric (Crenshaw, 1990). Data analysis and interpretation paid strict attention to the nuances within the Black experience and resist unnecessary generalizations to non-Black populations. There are limitations to formal ways of analyzing within-group differences due to sample size, N=361.

The fit of theory to the present study is clear, but is the necessity of this line of inquiry as obvious? To revisit questions posed in Chapter 1: Why are scholars investigating racism and protective factors for Black Americans? Why is there a need? Per CRT, racism is a permanent, enduring, and endemic staple of the American fabric. Thus, Black Americans—and others of color—will always face obstacles large and small that stem from racism. Due to the deleterious effects of racism on the lives of Black people (see Trent et al., 2019), interventions and support will always be necessary. However, prior to proposing solutions, one must understand the problem at hand.

Racism

A multi-faceted problem requires a system of solutions just as complex. Thus, it is critical to understand the underlying cause of racial stress in order to properly plan interventions to support Black families. The cause of racial stress and harm for Black people is racism itself (Carter, 2007; Carter et al., 2013; Franklin et al., 2006). Racism is a worldwide social pattern that impacts millions of world citizens, particularly those who can trace their ancestry to the global south (Losavio, 2020; Roberts & Rizzo, 2021; United Nations Human Rights Council Office of the High Commissioner, 2021). With roots in settler colonialism and white supremacy, racism is a system of power and privilege that confers more rights, access, and opportunities for the pursuit of happiness to those of European descent—or who occupy a close proximity to whiteness—at the expense of those of color, or those with less proximity to whiteness (Bonds & Woods, 2015; Merriam-Webster, 2020). The result is less access to resources and gaps in opportunity; examples include less access to healthcare, quality education, and gainful employment (Trent et al., 2019). Direct racial abuses also occur, which can cause emotional harm in the form of racial stress and racist-incident based-trauma (Carter, 2007; Jernigan & Henderson Daniel, 2011). There are also secondary physiological consequences, including a higher incidence of hypertension and comorbid health conditions; the effect sizes were unavailable, so these results should be interpreted with some caution (Din-Dzietham et al., 2004). All of these forms of systemic racism are influential, broadly shaping, culture, law, and policy, and also interpersonal relations, individual opinions, and subjective impressions of events. Lastly, systemic racism not only reflects racist views, but can also foster and sustain them.

Per CRT scholars, race is ordinary and endemic to American society (Bell, 1992). Its ordinariness means it has historically been insufficiently addressed and its endemic nature means that it permeates all systems and is likely a permanent part of the American fabric (Delgado & Stefancic, 2017). It is precisely its permanence and America's consistent and enduring failure to eradicate it that makes racism such an important issue to address. Black people will always face racism in this country; thus, it is our ethical duty as psychologists to always work toward ameliorating the inequities it causes, chiefly among them, health inequities. To this end, the American Psychological Association (APA) and National Association of School Psychologists (NASP), among other mental health organizations, firmly denounced white supremacy and created statements and policy aiming to improve anti-racist practices in the field at large (American Psychological Association, 2020; National Association of School Psychologists, 2020; Shullman & Evans, 2020).

Racism is an undeniable public health crisis that has direct correlates to negative health outcomes in Black communities (Bailey et al., 2017; Caughy et al., 2004; Heard-Garris et al., 2017; Pieterse et al., 2012; Trent et al., 2019). Among Black Americans, racism has been found to show statistically significant relations with heart disease (Din-Dzietham et al., 2004; Kuzawa & Sweet, 2008), other chronic illnesses (e.g., chronic pain; Burgess et al., 2009), and the epigenetic phenomenon of weathering (Grossi, 2020; Kuzawa & Sweet, 2008). In addition to physiological and epigenetic consequences, racism can wear heavily on self-worth and increase severity of anxiety and depression. Further, many view racism as a form of trauma and the resulting symptoms as a form of PTSD (Carter, 2007).

As described above, the deleterious effects of racism on Black Americans broadly are clearly demonstrated in the literature. Most of that work focuses on adult populations, but the

literature focusing exclusively on the impact of racism on child development is similarly robust (Caughy et al., 2004; Heard-Garris et al., 2017; Jernigan & Henderson Daniel, 2011; Trent et al., 2019). It is considered a "core social determinant of health that is a driver of health inequities" for children (Trent et al., 2019, p. 2). Low birth weight, prolonged exposure to stress hormones, and a predisposition to chronic illness are all correlates of pre-birth and early childhood exposure to racism.

Intergenerational Trauma

Based heavily in studies of patterns of trauma in Indigenous communities and families, understanding the phenomenon of intergenerational, or historical, trauma has wide applications in culturally-specific stressors (Gone et al., 2019; Mohatt et al., 2014). In the case of Black Americans, slavery is not the only historical atrocity that plays a role in intergenerational trauma. That period was followed by a chaotic reconstruction, the Jim Crow Era, the "War on Drugs" that disproportionately targeted Black individuals, and the unfortunate unremitting presence of highly publicized police brutality against Black people made possible by the wide availability of increasingly portable video cameras (DeGruy Leary, 2015; Graff, 2014). This lasting, near continuous form of trauma presents itself in many ways in individuals and their family members following an "exceptional form of social adversity," such as those listed above (Dubois & Guaspare, 2020, p.146; Kirmayer et al., 2014). Intergenerational trauma is defined in the following manner:

> "Families who generations ago experienced traumatic upheaval resulting from war, residential schooling, oppression and racism, natural disasters and other events, may experience various effects and enactments of the trauma passed on from parent to child.

> Transmission is considered to be unintentional, and often without awareness of the contribution of the original traumatic event."
>
> (O'Neil, Fraser, Kitchenham, & McDonald, 2016, p. 173)

In this article by O'Neill and colleagues (2016), the authors focus on the intergenerational trauma of Indigenous populations, utilizing the examples of forced displacement and the cultural genocide enacted through residential schooling. Negative outcomes from historical trauma include complex trauma and interrupted attachment (Larez, 2022), as well as interrupted recollection of the trauma (Laub & Lee, 2003; Schore, 2012). One important note that O'Neill and colleagues (2016) make is that the transmission is unintentional and without explicit awareness. Partly, it is the unconscious aspect of this process that has made it so difficult for psychologists to isolate (Prager, 2015). Prager describes the psychological injury of intergenerational trauma through several examples in his essay; he utilizes case examples from the Holocaust as well as South African apartheid. Here, he describes the national trauma of South Africa following the abolition of Apartheid:

> "Racism, shared by both victims and persecutors, becomes inscribed psychically and even bodily by all social members, and wittingly or unwittingly gets passed on long past the last survivor of the apartheid era dies. Each generation stands to receive this past trauma of racialized distinctions, now and experienced as new: thinking becomes action. The result is a *life constricted by perceived difference*, specific perceptions dominated by strong echoes of the past." p. 142, emphasis original

Here, Prager captures both the social and biological pathways of intergenerational trauma, both of which have been identified as critical for intergenerational transmission in minoritized communities affected by historical tragedy (Kellerman, 2013).

Biological Implications

here are several hypotheses about the mechanism by which intergenerational or cultural trauma is passed from parent to child, or within individuals that belong to a traumatized community across their lifespan. The epigenome, in both its biological and social conceptualizations, has been postulated as a potential mechanism of change (Aroke et al., 2019; Dubois & Guaspare, 2020). Broadly, epigenetics refers to the study of changes in gene expression (phenotype) over the lifespan that become heritable, while the underlying DNA sequence (genotype) remains unchanged (Dupont et al., 2009). Although race is acknowledged as a social construct, among genetics researchers (Aroke et al., 2019) the lived-experiences associated with racism are known to affect health in a measurable way (Williams et al., 2016). Adverse childhood experiences (ACEs), fewer health and mental health resources, higher incidences of depression and chronic stress are all factors that disproportionately affect the Black community in the United States and may contribute to epigenetic changes that lead to further negative health outcomes (Aroke et al., 2019).

Social scientists have adapted this underlying genetic conceptualization in order to make the phenomenon accessible to consumers of social science research. “Social epigenetics” is a conceptualization that focuses more on the social determinants that drive biological markers and genetic changes (Chung et al., 2016; Dubois & Guaspare, 2020; Mulligan, 2016). Dubois and Guaspare (2020) stress the importance of the study of trauma as a direct precursor to the study of social epigenetics. It is this critical connection that ties the biological marker of epigenetic changes to the psychological and social stressors that can devastate a family or community; racism is one such stressor (Coleman, 2016; Grossi, 2020). These two concepts, social traumas

and biological markers, have in common a human component that drives the change. The socialization itself drives the change, but how does socialization of trauma in families operate?

Parental Behaviors

Aside from the strictly biological, there exist other pathways of intergenerational trauma, or the transmission of biological and psychic injury resulting from devastating social stressors through families. Historical stressors, for example the Holocaust, slavery, internment camps, and genocide, have been well studied in a variety of ways. One lens used to conceptualize the way trauma travels through families is family systems theory (Fitzgerald et al., 2020). First, family systems theory suggests that the individual members of any given family are all interconnected, with each person's wellbeing influencing other members of the family in myriad ways either directly, or indirectly (Abrams, 1999). Within this framework, there is room for understanding how trauma, and the ways in which it manifests emotionally, cognitively, and behaviorally in parents, can influence children. Indeed, research shows that negative dynamics between parents, which can develop in the wake of various stressful experiences, can predispose children for internalizing and externalizing symptoms (Masarik & Conger, 2017). Relatedly, *positive* dynamics, either occurring naturally or fostered through intervention, can reduce these experiences for children (Cui et al., 2005; Kouros et al., 2008).

Another framework for conceptualizing the transmission of intergenerational trauma through families is through attachment relationships (Friend, 2012; Isobel et al., 2018). In Isobel and colleagues' (2018) systematic literature review investigating interventions for intergenerational trauma, two primary themes emerged through grounded theory analysis: (a) resolving parental trauma, and (b) actively supporting parent-infant attachment. Their analysis postulates that intergenerational trauma can begin to manifest as early in life as infancy, and

early intervention is critical for interrupting this pathway. Notably, the step of resolving parental trauma is related to several other lines of family intervention, wherein the parent is supported alongside or in addition to the child. Borrowing from family systems theory, this line of research suggests that resolving these maladaptive family processes requires supporting everyone within the family unit (Fitzgerald et al., 2020; Isobel et al., 2018). It is clear from the literature that intergenerational trauma is a devastating phenomenon, often tied to harmful social stressors and events and largely impacting minoritized populations (Coleman, 2016; Graff, 2014; O'Neill et al., 2018). In order to understand the way that racism can contribute to psychological distress, a thorough review of the path from racism to racism-related stress is warranted.

From Racism to Racism-related Stress

Exactly how does a global-scale phenomenon like racism have such a strong association with individual behavior, biological health, and psychosocial adjustment? As shown above, this occurs through a lack of access to resources such as medical care and education that in concert with a psychological burden engendering stress degrade the health of the Black body over time. Thus, racism can be conceived of as a pathway influencing a cascade of consequences from biology to adjustment, to family interaction, and finally to the propagation of intergenerational consequences. A distinction is drawn here in direct contrast to *non*-race-related stressors, which occur for all people and for those of color, in addition to race-specific stressors.

Scholars have sought to elucidate the differentiation between racialized stress and general stress, in part to make plain that these two differing categories of distress merit differing solutions (Pieterse & Carter, 2007; Pieterse et al., 2013). Pieterse and Carter (2007) found that when using hierarchical regression modeling which controlled for general stress, racialized stress predicted an additional 4% of the variance in psychological distress for Black men in the

working class, and an additional 7% of variance in distress for middle- to upper-class Black men. In this research study, general stress is considered in the model for the same reason Pieterse and Carter (2007) included it in theirs. Psychological distress is exceedingly complicated; hence, separating out the various potential etiologies of psychological distress is critical in modeling these constructs, just as it is critical in providing intervention. In this dissertation, general stress and racism-related stress are modeled alongside one another as parallel predictors. These analyses should aid in the identification of potential similarities or differences in their respective contribution of unique variance.

General Stress

Stress is a ubiquitous experience encompassing so much of human life that it is difficult to define. Lazarus and Folkman's (1984) characterization of stress and coping is widely heralded as a gold standard, shaping stress and coping research for decades and serving as the foundational model for several subsequent theories of stress and coping in various contexts (Biggs et al., 2017; Nilsson, 2006). In their Transactional Model of Stress and Coping (TMSC), Lazarus & Folkman (1984) describe stress as a transactional phenomenon occurring between an individual and their environment. This theoretical conceptualization of stress and coping allots space for cognitive processes underlying stress wherein individuals make meaning of their environment; these processes can be characterized as a complex, bidirectional interaction (Folkman, 1984; Lazarus, 1966; Lazarus & Folkman, 1984). Stress is more than a psychological experience however, instead, it has a complex neuroendocrine foundation that involves several of the body's systems including the brain and nervous system, gastrointestinal or "gut" functioning, and kidneys and adrenal functions. Together, the psychology and biology of stress intersect to

create a fascinating problem for clinicians to try to address. What follows is an overview of the psychological and biological underpinnings of general stress.

Biology of Stress

The biology of stress is inordinately complicated, involving cognitive and emotional experiences, the enteric (gut) microbiome, the hypothalamic-pituitary-adrenal (HPA) axis, and the body's immune system all working together in a system only recently illuminated by psychoneuroimmunology scholars (Irwin & Slavich, 2017; Slavich, 2020a, 2020b). Each aspect of functioning represented in the field of psychoneuroimmunology is important to understand from the perspectives of public health and stressor-focused psychological interventions. While many psychologists focus strictly on the mental wellbeing outcomes of stress-directed interventions, a public health minded clinician bears in mind that overall health and wellness are tightly connected to the subjective psychological experience of stress.

The psychological experiences of stress and anxiety trigger the activation of any of the body's many stress systems. Chronic stress can lead to overactivation of these systems, which can have deleterious effects on the body's organ systems, leading to conditions like hypertension, global inflammation; digestive problems, and more (Bailey et al., 2011; Brotman et al., 2007; Hamer et al., 2008; Slavich & Irwin, 2014; von Kanel et al., 2001). Thankfully, both the subjective experience of stress and its biological antecedents and consequents can be mediated by psychological intervention (Loucks et al., 2019; Momeni et al., 2016;) and social supports and personal resiliency factors (Catabay et al., 2019).

Psychology of Stress

The psychological experience of stress is the driving force behind the many systems of the body that ultimately result in negative health outcomes. However, the literature reflects that

addressing these stress responses can moderate the long-term negative effects of stress. Mindfulness (Momeni et al., 2016), Cognitive Behavioral Therapy (CBT; Tully et al., 2017), and psychopharmacological interventions (Golding et al., 2005) have all been found to support improved health outcomes. In order to understand why these interventions are effective, one must first understand what exactly they are targeting. Just how does stress work in the brain?

Lazarus and Folkman (1984) proposed that the initiation of the stress process is a constant and ever-evolving appraisal of potential stressors in the environment. The decisions that follow this appraisal generate emotional responses. In the case of harmful stressors, distress follows, either initiating coping strategies or leading to unmediated negative sequelae. These coping responses are theorized to lead to any number of changes within the context of the individual-environment transactional relationship: (a) positive coping approaches lead to resolution of stress and subsequent positive emotions, and (b) ineffective or unsuccessful coping leads to feelings of distress, prompting the individual to reevaluate. At the conclusion of this process, stress is the experience of harmful stressors that exceeds one's coping capacity. In conclusion, the most significant factors of this conceptualization of stress are the initial appraisal and the coping response itself (Biggs et al., 2017; Folkman & Lazarus, 1985; Folkman, 1997; Lazarus & Folkman, 1984).

Worry and Rumination

As conceptualized by Lazarus and Folkman (1984), a critical part of the psychology of stress is the initial cognitive appraisal. Closely related to appraisal are the other psychological responses and patterns associated with stress, namely worry and rumination. Indeed, worry and rumination have been found to extend the time individuals take to return to baseline after experiencing psychological distress following stress appraisal (Wells & Matthews, 1994;

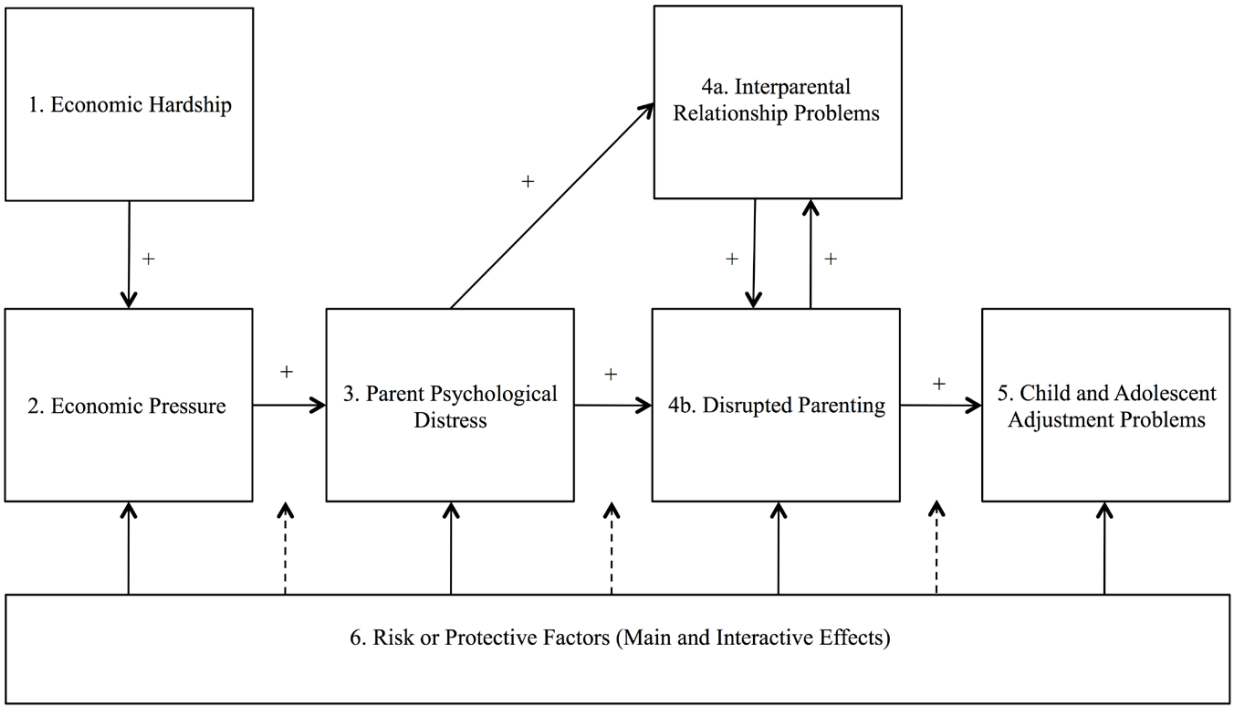
1996). Wells (2009) describes worry as a future-oriented internal process typically used to prepare for and make plans to avoid danger. In some cases, such as Generalized Anxiety Disorder and Major Depressive Disorder, worry extends well past its utility and becomes a destructive process, leading to maladaptive ruminative or repetitive thoughts that become difficult to manage (American Psychiatric Association, 2013; Capobianco et al., 2018; Ruscio et al., 2015). Importantly, worry has been linked to not only psychological distress, but also the many physiological aspects of stress described above, namely high blood pressure and cortisol levels (Ottaviani et al., 2016) as well as tachycardia (Papousek et al., 2017). Worry is a distinct, yet central construct in understanding and thus intervening for stress.

Stress and Parenting

Once one has an understanding that stress can transfer from parent to child along several implicit or biological pathways, and how individuals process and experience stress, an understanding of the role of stress in parenting and family dynamics can be illuminated. The Family Stress Model (FSM) is a well-established framework in family systems literature (Conger & Conger, 2002; Conger et al., 2010). The FSM allows for scholars and clinicians to conceptualize the pathways of stress within the family unit, with a focus on child development. The majority of support for the FSM is centered in socio-economic hardship, but the originators of the model have sought to expand it to other social stressors (Masarik & Conger, 2017). Thus, this model can be extended to the exploration of other stressful constructs from educational stressors to racial ones. Within the context of FSM, initial *hardships* are hypothesized to lead to *pressures*. *Pressures* result in parent psychological distress, which splits in one of two directions: (a) interparental relationship problems, and (b) disrupted parenting. The natural outcome of this process is problems of adjustment on the part of the child in the home, which can manifest as

psychological distress and behavioral dysregulation (Masarik & Conger, 2017). Underpinning the entire process are risk and protective factors that may influence any given aspect of the model. See Figure 2 for a model adapted from Conger, Conger, and Martin (2010) and Conger and Conger (2002), as presented in Masarik and Conger (2017).

Figure 2. Family Stress Model (Masarik & Conger, 2017)



Following along with the expansion presented by Masarik and Conger (2017), this model can be adapted to any number of social stressors, and several studies have done exactly that (Barnett, 2008; Nievar et al., 2014; Simons et al., 2016; White & Roosa, 2012). In conclusion, the FSM has many applications, including conceptualizing the role of social stressors on parents' functioning, and the influence of that potential disrupted parenting on child adjustment and other outcomes.

Stressed Parents

The potential negative influence of disrupted or inconsistent parenting on child development has been illustrated in prior work (Cappa et al., 2011; Visconti et al., 2002). In fact, parenting stress has been identified in the literature as one of the most regularly explored influences on child behavior (Cappa et al., 2011; Moreland et al., 2016 [medium effect size]). The specific pathways that drive that association are critical to understand prior to developing appropriate interventions to support stressed parents or families. Cummings and Davies (1994) suggest an ecological model that accounts for the influence of parental factors such as mental health and behavior on child outcomes. Taken together with the FSM, there are multiple sources of evidence for the idea that parental behavior and distress influences children.

Bidirectional Stress Pathway in Families

The theories introduced above focus mostly on a unidirectional path of stressor influence from parent to child. In contrast, the transactional model underscores the potential of a bidirectional set of pathways between (a) children and their environments, and (b) children and their parents (Cherry et al., 2019; Sameroff, 2009). Although the transactional model likely best represents the natural way that stress is amplified and mitigated between parent and child, this study focused on the part of this system flowing from parent to child because parent behavior is a powerful point of intervention in family systems. Moreover, identifying intervening protective factors between parental stress and child outcomes is a core question of this research. Thus, while recognizing that movement of influences is likely organically transactional, the more complex model is not addressed in this dissertation.

Child Outcomes Associated with Parent Stress

Prior research and theory have established a clear link between parental distress and a negative impact on child developmental outcomes. These theories also make space for innumerable combinations of child, parent, community, and environmental factors. Toward the end of this review of literature, child outcomes specifically related to race are outlined, but a preliminary description in a general sense is helpful to set the stage for that more specific literature.

Parenting stress has been found to be associated broadly with child externalizing problems (Williford et al., 2007), and more specifically, child disruptive behavior (Moreland et al., 2016 [medium effect size]). Lazarus and Folkman's (1984) model of stress and coping can be applied to the family system. Essentially, parent and child coping skills, as well as the stress experiences themselves, are interconnected (Cappa et al., 2011). Thus, when a parent is stressed, and is equipped with poor coping mechanisms, that pattern may be reflected in the child, who responds with emotional or behavioral dysregulation (Visconti et al., 2002). In their 2016 study, Moreland and colleagues found that reducing parent stress levels and increasing internal locus of control had a positive influence on child coping skills and reductive effect on disruptive behavior. Notably, they were investigating locus of control, which is a psychological experience that can be associated with stressors related to oppression, such as racism-related stress, because of the salient lack of control that minoritized individuals have over the systems of oppression that determine their minoritization (Pieterse & Carter, 2010). This study in particular holds relevance for investigating parental stress related to racism.

In a study of the role of community violence on parenting behaviors and child outcomes, Al'Uqdah and colleagues (2015) found a complicated relationship among exposure to

community violence, parent behaviors, and children's emotional functioning. In their survey-methods investigation of Black family experiences in a large metro area, they found that the direct pathway from parents' community violence exposure to children's social emotional competence was not significant. Rather, parental community violence exposure was mediated by parental behavior (e.g., parenting stress, RS practices), which in turn influenced children's social emotional functioning. Though, their study had a limitation of a small sample size ($N = 57$) for their method (hierarchical regression), limiting the power of their conclusions. Relatedly, mediation effect sizes were not reported, limiting the generalizability and reliability of the study findings. Despite these significant limitations, their findings support existing theory and literature that finds that parent behavioral factors have a direct bearing on child functioning.

Parent Interventions

The research on parent stress includes compelling scholarship on the power of parent-focused treatment to improve child outcomes or decrease problem behaviors (Chorpita et al., 2017; Dillman Taylor, 2011; Graziano et al., 2020; Kohlhoff et al., 2020; Moreland et al., 2016; Neece, 2014). These studies describing parent-focused treatment reflect a wide range of approaches that are designed to reduce parent distress and tap into a "spill-over effect" that improves child developmental outcomes or reduces problem behaviors. Further, changing parent attribution, coping skills, cognitive patterns, and parenting behaviors can be an important contribution to the family system, benefitting the child. Parent-focused treatments include child-parent play therapy (Dillman Taylor et al., 2011), Parent-Child Interaction Therapy (PCIT; Graziano et al., 2020; Kohlhoff et al., 2020), Mindfulness-Based Stress Reduction (MBSR; McGregor et al., 2020), and Parent Management Training (Kazdin, 2005).

A careful review of the samples of the above studies on parent-focused interventions found low representation from populations of color. Further, critically missing from the literature are (a) whether these interventions work for race-based stress; and (b) whether the interventions as described work as well for parents and families of color. Generally, in psychology it isn't generally recognized that Black Americans have all the stress of parenting *in addition* to this racialized form of stress that plays a role in outcomes for children.

Racism-related Stress

Black people face subtle racial discrimination, blatant racism, race-related bullying, and racial microaggressions throughout their lives (Anderson et al., 2021a). Literature describes measurable experiences of racial stress following an individual's experience with racism or racial discrimination (Anderson et al., 2015; Anderson et al., 2021b; Bernard et al., 2020; Brody et al., 2006; Carter, 2007; Carter Andrews, 2012; Caughy et al., 2004; Fisher et al., 2000; Franklin et al., 2006; Jernigan & Henderson Daniel, 2011; Jones et al., 2020; Pieterse et al., 2013; Thomas et al, 2010). Defined as the psychological injury that follows experiences with racism or racial discrimination, racism-related stress is an umbrella that encompasses many emotional, behavioral, and cognitive responses (Franklin et al., 2006). Harrell (2000) provides a more explicit definition based upon the psychological stress definition put forth by Lazarus and Folkman (1984):

> "The race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that are perceived to tax or exceed existing individual and collective resources or threaten well-being." – p. 44

Racism-related stress may follow interpersonal racism, experiences with biased policies or procedures, racially-charged media coverage, or racially hostile environments. These experiences

include being followed by a store clerk, being victimized by sub-prime loan officers based on skin color, having to witness footage of police killings of Black men, women, and children, or enduring predominately white institutions, respectively. Rather than intent, it is the *perception* of racism and discrimination, and the cognitive, behavioral, and emotional experiences that follow which determine the stress response (Anderson & Stevenson, 2019a; Fischer & Shaw, 1999). Given the United States' fraught history of systematic racial abuses and codified discrimination, identifying and providing support for racial stress in people of color is critical. Addressing this issue is an urgent matter of public health, community healing, and social justice.

Racial Stress and Trauma

Research has repeatedly demonstrated that racial stress leads to psychological distress, and in some cases, race-based trauma (Brody et al., 2006; Bryant-Davis & Ocampo, 2006; Carter, 2007; Jernigan & Henderson Daniel, 2011). Racial trauma is the intense negative psychological reaction that mimics the symptoms of PTSD (e.g., reduced emotional regulation, flashbacks, physiological changes, depressive symptoms, hypervigilance to traumatic stimuli; American Psychiatric Association, 2013 [APA, 2013]; Carter, 2007; Carter et al., 2020). It can result from one racially stressful event, or the continual buildup of racial stress over time. Racial trauma as a construct will not be explored in depth in this paper, but an awareness of the seriousness of unaddressed racial stress illuminates the sense of urgency of this work. Further, racial stress and coping literature are often published within the broader category of racial trauma. For example, the January 2019 volume of the *American Psychologist* featured studies of not only racial trauma, but also theories of racial stress and coping, racial regard, historical racism, and psychopathology in minoritized persons (Comas-Díaz et al., 2019). Less has been written about specific interventions addressing the effects of race in the mental health of children

and families. Despite the dearth of research, several important contributions to the body of work on race-specific interventions exist in the literature.

Racial Stress and Child Development

Racism has well-documented deleterious effects on child health and wellbeing (Caughy et al., 2004; Heard-Garris et al., 2017; Trent et al., 2019). Additionally, the literature reflects that schools, in particular, serve as an environment in which Black children and adolescents endure racism (Byrd & Carter Andrews, 2016; Carter Andrews, 2012; Jernigan, 2009; Greene et al., 2006; Jernigan & Henderson Daniel, 2011; Perry et al., 2003). In addition to experiences in schools, racism can influence children indirectly through their parents' experiences. For example, maternal experiences with racism have been linked to birth disparities (Braveman, 2017; Dominguez et al., 2008). Additionally, the preschool-aged children of Black parents may experience higher levels of anxiety and depression on occasions when their parents have not successfully coped with racialized experiences (e.g., confronting the offender, taking action; Caughy, 2004). These studies make it clear that there is a racial stress transmission of sorts that occurs within the Black family unit (Heard-Garris et al., 2017).

Racism-specific Interventions

There is a body of empirical and clinical writing currently emerging that attempts to provide evidence for solutions to racial stress and trauma. These studies aim to harness prevailing theories about racial stress and coping into effective, evidence-based interventions. There are many clinical barriers when it comes to treating clients who are experiencing psychological stress or trauma following a racist incident. First, historically, clinicians are not well prepared to address issues of race in general, let alone within a therapeutic relationship (Scurfield & Mackey, 2001). This dovetails with confirmation in later work that there is a

pervading lack of awareness of the ways race can impact the psychology of Black individuals, and people of color broadly (Carter, 2007). Further, on the client's side of the therapeutic alliance, ethnic minority individuals may avoid bringing up race when they cannot trust that a clinician will be supportive (Helms, 1990). Lastly, scholars have recommended assessment of racial stress and trauma (Scurfield & Mackey, 2001). However, prior to the 21st century, there were no validated, reliable measures of racist-incident based psychological distress. All of these barriers, and more, hindered the progress in treating and intervening for racial stress and trauma.

In 2005, Bryant-Davis and Ocampo published a theory of racist-incident based trauma that served as a strong foundation for much of the following literature in this area. One of the earliest prominent studies into this work was a therapeutic guide to effectively intervening for what the authors called racist-incident based trauma (Bryant-Davis & Ocampo, 2006). They emphasize that therapists learn how racial trauma differs from other types of trauma and that they familiarize themselves with systemic oppression and individual prejudice prior to seeing clients. They also recommended the following steps be implemented as part of treatment: (a) acknowledge, (b) share, (c) safety and self-care, (d) grieving, (e) face internalized racism, (f) process anger, and (g) develop strong coping strategies. This paper is not an empirical study, but rather a presentation of implications of race-based trauma and treatment recommendations. As opposed to formal qualitative or quantitative methods, they use a single, detailed case study to support their argument. The strength of their paper, and why it endures as a promising start to this body of treatment literature, is their exhaustive summary of previous stress, trauma, and racial stress and trauma research. On this strong foundation, they make an excellent case for treatment. For clients for whom these practices would be effective, clinicians should adopt and

practice from a *human rights* perspective (Lawrence, 2001). The description in the article dovetails with what we are now referring to as "social justice" practices within psychology.

Bryant-Davis and Ocampo (2006) provided an important foundation on which future scholars could build research and recommendation for Black children and adolescents. Jernigan and Henderson Daniel (2011) review much of the same literature as history as Bryant-Davis and Ocampo (2006), but they extend that work into the specific context of Black Americans. For example, they dedicate much discussion to the ways in which schools are a setting in which Black youth are particularly vulnerable to discrimination. One factor of this vulnerability is that Black children and adolescents may experience racial stress prior to their development of racial awareness, which can inform coping skills. In a school-based qualitative study, authors describe "physical and psychological vulnerability and hypervigilance" that many Black children feel when their safety is threatened due to fear of racial discrimination (Henderson Daniel, 2000). Jernigan and Henderson Daniel specifically list Bryant-Davis and Ocampo's (2006) foundational work in providing therapeutic support for racial trauma. This is the first in-depth exploration and recommended adaptation of that work for Black children specifically.

Jernigan and Henderson Daniel (2011) provide several specific strategies and recommendations for tailoring broader racial trauma intervention practices to Black youth. They reference the fact that many Black children learn about racism and its corresponding resistance at home from parents and elder family members. There is often an oral storytelling that occurs in Black families to prepare children with the discrimination they may face (Stevenson, 1994). This is an example of *racial socialization* (RS) as a way for Black parents to ensure positive racial identity development in their children (Thomas & King, 2007). RS is at the core of the literature

around coping with racial stress. It is an effective coping strategy, and the most effective interventions position themselves around it.

Racial Socialization

Beyond storytelling, RS is a sweeping term that refers to the intentional messages and practices parents of color use to prepare their children to navigate our racialized society (Anderson et al., 2018a; Stevenson et al., 2021; Ward, 1995, 1996). Research into this topic stretches back decades, finding its source in explorations of how African American parents approached the task of raising their children within the context of anti-Black racism (Hughes et al., 2006; Ward, 2000). Researchers have long sought to capture the nature of the "conversations and actions that communicate to [our] children how to survive with dignity and pride in a racist world" (Stevenson et al., 2001, p. 46). RS as a term is most closely associated with Black families, while terms like "cultural socialization" and "ethnic socialization" has been used for Latinx, American Indian, and Asian families (Hughes et al., 2006). Thus, for the purposes of this project focusing on Black families, RS will be used exclusively.

Racial Socialization has been found to be a foundational source of racial identity, attitude, and knowledge development in Black youth (Hughes et al., 2006; Ward, 1990). Further, the literature demonstrates that a notable minority of Black parents and families *do not* engage in RS efforts (Neblett et al., 2008; Neblett et al., 2009). Thus, RS is a cornerstone of the Black family experience. However, it is a broad label covering a wide variety of parenting practices and processes. Researchers have made attempts to classify these in the literature.

Types of Racial Socialization

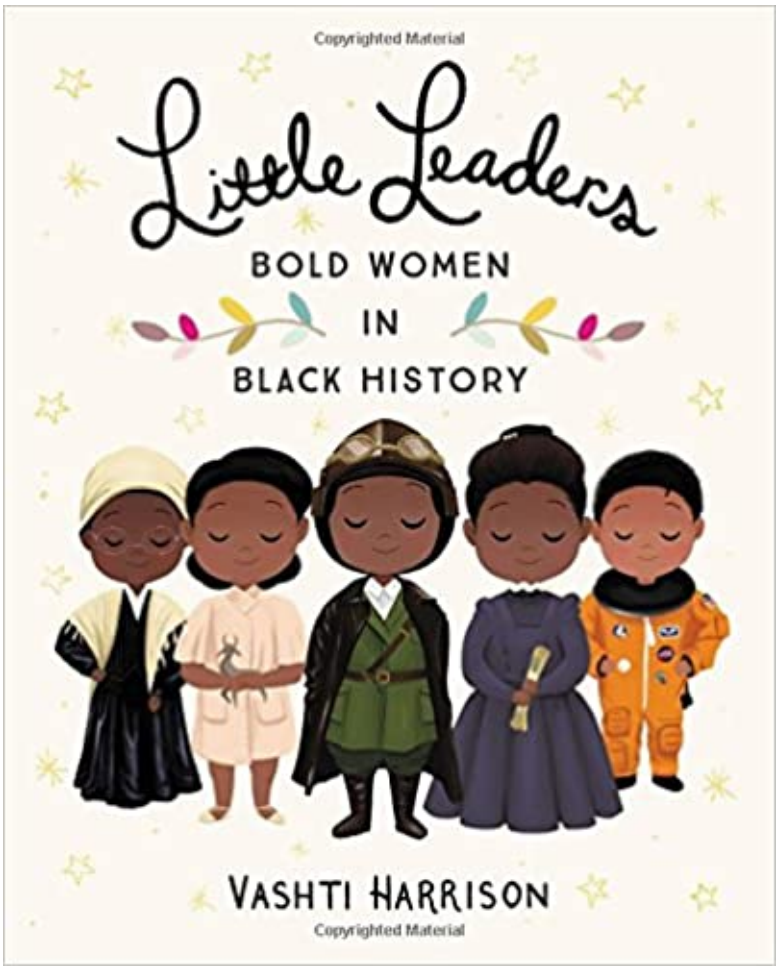
Several models of RS have been proposed over the years. Hughes et al. (2006) assert four types of RS: (a) cultural socialization, (b) preparation for bias, (c) promotion of mistrust, and (d)

egalitarianism (Hughes et al., 2006). Cultural socialization refers specifically to RS practices that bring children into contact with Black cultural content such as arts and performance events, Black toys and games, and books illustrated for children of color. Preparation of bias describes those conversations that steel Black youth against the racialized socio-cultural obstacles to which they are exposed. Parent conversations with children include teaching that some people will treat them differently because of their race and reminders that they must work harder than other races to achieve at the same level. Promotion of mistrust includes discussing and encouraging wariness of interracial interactions, particularly interactions with whites. Egalitarian approaches foster beliefs that everyone in the U.S. is equal, encourage interracial friendships with peers, and may even involve parents avoiding discussions of race (Hughes et al., 2006).

A conceptualization of RS with six tenets approach has also emerged in the literature. This approach is similar to the four-pronged description of RS. Its theoretical structure includes racial pride messages, racial barrier messages, egalitarian messages, self-worth messages, negative messages, and socialization behaviors (Bowman & Howard, 1985). In this approach, racial pride messages describe unity among Black peoples, exposure to Black heritage and history, and establishing positive regard for Black folks in general. See Figure 3 (Little Leaders Book Cover) for an example. Racial barrier messages include explicit instruction about institutional and individual racism and the effects thereof. Egalitarian messages stress equality between Black Americans and other groups and encouragement for relationships with other racial groups. Self-worth messages are generalized messages about the value and specialness of the youth being socialized. Negative messages include exposure to negative racial stereotypes and generalizations about Black Americans. Lastly, socialization behaviors include specific socialization actions such as the purchase of Black toys and games and trips to cultural events.

These six subtypes serve as the foundation of the Racial Socialization Questionnaire-Teen and Racial Socialization Questionnaire-Parent, a quantitative measure for RS frequently utilized in the literature (RSQ-T/P; Lesane-Brown et al., 2009).

Figure 3. *Little Leaders* Book Cover



Coard and colleagues (2004) conducted a qualitative investigation of RS in low-income, U.S.-born Black parents of five and six-year-old children. Methodologically rigorous interviews were conducted with fifteen, low-income/economically marginalized (LIEM) U.S.-born Black mothers from two U.S. cities. A grounded theory approach yielded four distinct RS themes: (a) racism preparation, (b) racial pride, (c) racial equity, and (d) racial achievement. These categories could be described as messages preparing their children for future injustice, positive

messages about Blackness, egalitarian themes, and statements that emphasize the necessity to excel academically, respectively. These three prominent models of RS share significant overlap in conceptualization in that reparation for bias, egalitarianism, cultural practices, and racial pride are all present in some form across these three approaches (Bowman & Howard, 1985; Coard et al., 2004; Hughes et al., 2006).

Importantly, aside from these commonalities, extreme variability exists in the literature, which spans four decades. Inconsistent conceptualizations, definitions, and methodologies have led to inconsistent findings about the benefits and shortcomings of RS as a parenting approach (Elmore & Gaylord-Harden, 2013). Further, the body of literature focuses significantly on describing RS as a protective factor in Black families, without reaching consensus about which specific components within RS are driving that protection and fostering positive outcomes (Anderson et al., 2020).

Racial Socialization Competency

A critical new thread of RS research has emerged in recent years. Unraveling this thread—racial socialization *competency*—allows researchers and clinicians alike to understand the aspects of RS that contribute most directly to the positive outcomes in children with which "successful" RS is associated. Up until this point, the research on RS has focused on the content and frequency of RS as opposed to competency (Anderson et al., 2020). This foray into studying RS competency, rather than types, allows psychologists, and eventually the Black families they serve, to understand how RS promotes coping (Anderson et al., 2020). Anderson and colleagues (2020) capture the urgency of this new research frontier best:

> "…we must begin to ask, how competently can families transmit and how competently can children acquire and use intellectual, emotional, and behavioral racial socialization-based skills to successfully negotiate racial encounters." (p. 427)

Due to the critical task researchers have before them of unpacking and critically examining this construct, a primary driver of the proposed study is to shed light on the nature of the relations between racial socialization competency and other factors that influence Black family interactions and child development.

Anderson and Stevenson (2019a) postulated that RS competency had three primary underlying constructs: stress, skills, and confidence. In the context of RS competency, parental stress is understood to stem from the encumbrance of preparing the next generation to successfully navigate our racialized society. In order to reach a point of competency with RS, parents must learn to manage this stress. Once Black parents identify this stress, and develop the coping skills to manage this stress, the development of RS competency skills begins. Ideally, the knowledge imparted from parent to child can become "a practiced and reliable skillset established through bidirectional communication with a socializing agent," usually a caregiver (Anderson et al., 2020, p. 428). The last theorized subcomponent of RS competency is confidence, or the beliefs a Black parent holds about their ability to successfully engage in RS activities with their child. Though this confidence could be pre-existing, the RECAST process-oriented approach leaves room for confidence to grow following an initial reduction in stress and development of skills (Anderson & Stevenson, 2019a).

Anderson and colleagues (2020) tested this theorized model using the Racial Socialization Competency Scale (RaSCS), finding that while confidence and skills emerged as intact factors, a better fitting model for stress sorted into two factors: (a) general and (b) call to

action. General RS competency stress as measured by the RaSCS refers to the tension parents may feel related to teaching their children the basics about race. Such items included teaching children to notice racism in the world around them or provide education about Black history. RS competency stress-call to action was related to concerns a parent may have about teaching their child to do something about racism in the world, that is, speak up or advocate for themselves in situations of racial discrimination. Importantly, in the interpretation of these psychometric analyses, the authors suggest that stress-general and stress-call to action can still be addressed under the overarching construct of stress in cases of assessment and intervention.

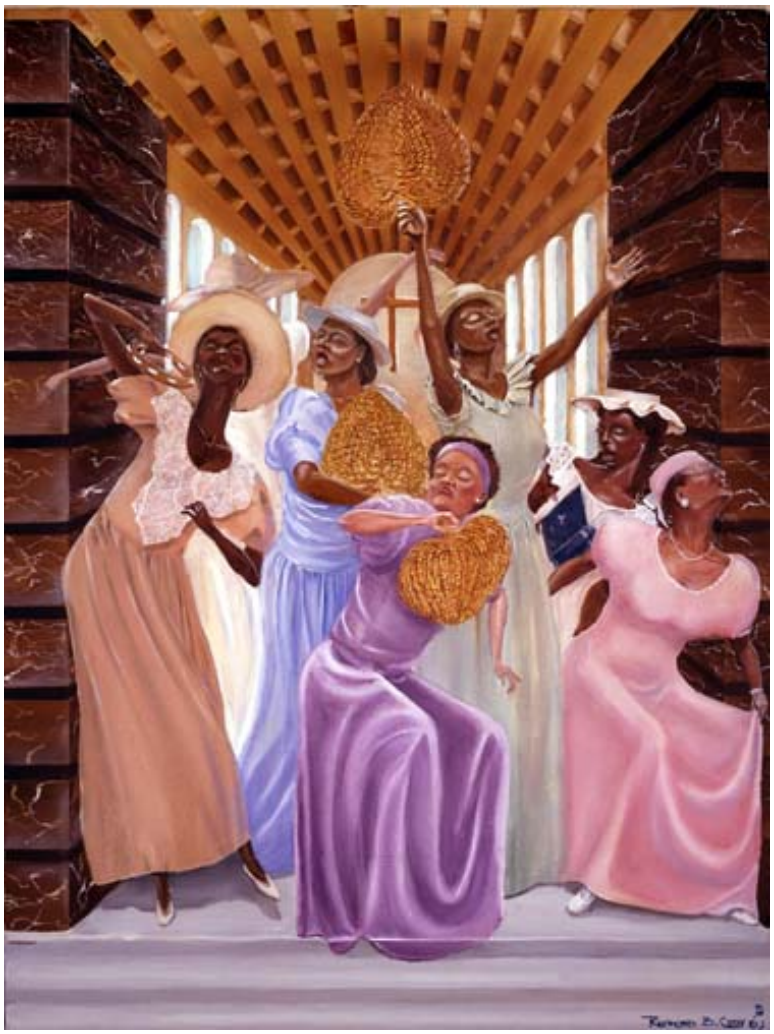
Benefits of Racial Socialization

In the psychological literature, there is often an emphasis on the protective properties of positive RS strategies that serve as a buffer between a child's wellbeing and encounters with racism (Thomas et al., 2010). The body of research supports the idea that it is associated with positive outcomes for youth. One of the most consistent findings in the literature is that RS allows for the development of cultural pride and adaptive coping mechanisms that make youth more resilient to racist experiences and racial stress (Neblett et al., 2008; Stevenson et al., 2002; Stevenson, 1995). Additionally, RS has been found to be associated with higher self-esteem (Murry et al., 2009) and comparatively higher academic outcomes (Chavous et al., 2003).

In addition to better academic performance and increased self-regard, RS has also been linked to reduced externalizing behavior in African American youth. Rodriguez, McKay, and Bannon (2008) conducted a longitudinal study to examine the influence of racial socialization behaviors on child behavior outcomes in a sample of 140 LIEM African American parents. They found that specific types of RS—namely spirituality and religiosity as coping—in tandem with effective discipline strategies was related to lower rates of child externalizing behaviors. See

Figure 4 below for an example of spiritual/religious RS. Due to the protective, co-occurring nature of spiritual and religious coping and effective discipline strategies in their findings, Rodriguez and colleagues (2008) thus conclude that there is a relation between culturally specific and universally recommended parenting approaches. The authors also found that most Black parents use at least some RS in their parenting. Notably, they concluded that there may be negative consequences to folding too little RS into general parenting practices.

Figure 4. “Rock-A-My-Soul” by Raymond Cody (reproduced with permission) is an example of socialization focused on race and religion



Racial Socialization Interventions

The literature strongly suggests that RS in Black families has clear, measurable positive effects, regardless of ethnicity, methodology, or research question. It has also been proposed as a coping mechanism along the lines of Lazarus and Folkman (1984) in the RECAST model (Anderson & Stevenson, 2019a). Racial socialization is to RECAST what any number of other parent interventions have been found to be to Lazarus and Folkman's (1984) generalized model of stress and coping. Research has suggested that RS could be a powerful addition to existing parent interventions, largely due to its positive effects on Black family wellbeing and child outcomes (Coard et al., 2004). In response to this call from the literature, several attempts at creating an effective RS intervention exist. One such intervention is EMBRace (Engaging, Managing, and Bonding through Race; Anderson & Stevenson, 2019b), a manualized approach developed at the University of Pennsylvania, and currently housed within the University of Michigan School of Public Health. Its mission is to heal racism-related stress and establish protective factors for Black families and children.

EMBRace. The EMBRace Program is a five-session psychosocial intervention specifically designed to prevent and intervene for racial stress by fostering RS competency in Black families. Each session includes a parent-only component, a child-only component, and a component where the family unit comes together as a dyad with the interventionist. The first session is an interview and quantitative measure data-collection meeting, followed by five manualized CBT and psychoeducation sessions, and the last session is a closing interview (Anderson et al., 2018b, 2018c; Anderson & Stevenson, 2019b). EMBRace was developed in part to the need for treatment that became apparent following Trayvon Martin's 2014 murder and the subsequent rise of the Black Lives Matter movement (R. Anderson, personal communication,

September 24, 2018). Anderson and colleagues recognized the significant risks Black American youth face from reoccurring experiences with racism. Prior theories assert that these youth are at risk for negative biopsychosocial outcomes (Bernard et al., 2020; Brody et al., 2006; Bryant-Davis, 2005, 2007; Carter Andrews, 2012; Clark et al., 1999). These same theories postulated that proper coping strategies serve to mediate the negative outcomes of racial stress and trauma.

The EMBRace intervention is intentionally tailored to the experiences of Black American youth and their families (Anderson et al., 2018b, 2018c). Session titles are derived from soul, funk, and hip-hop music, all genres pioneered by Black American artists (Anderson et al., 2018c). Much of the psychoeducation is built around the expectations of anti-Black racism in the US context. Instruction in strong parenting practices was developed with knowledge of historical and current Black American parenting practices in mind (Anderson et al., 2018c). Lastly, the example activities are specifically related to the Black experience. For example, a family tree exercise allows for some reclaiming of often painful family histories for Black Americans, especially those descended from enslaved Africans (Anderson et al., 2018c; Anderson & Stevenson, 2019b). A summary of the intervention sessions is available in Table 1 below. All of these separate parts are meant to come together to build a cohesive development of positive racial socialization competency, one of the most salient coping mechanisms for racial stress and prevention techniques for racism-related stress and trauma (Anderson et al., 2018a, 2018b, 2018c; Caughy et al., 2002; Coard et al., 2004; Elmore & Gaylord-Harden, 2013; Fischer & Shaw, 1999; 2013; Neblett et al., 2009; Neblett et al., 2008; Thomas et al., 2010).

Table 1. Overview of the EMBRace Intervention: Targeted Skills, Content, and Example Activities (Adapted from Anderson et al., 2018b)

Session	Engaging in RS Content	Managing Stress	Bonding and Effective Delivery	Example Activities
Pre-test		Baseline Assessment		
Session 1 "Say it Loud"	Cultural Socialization	Racial Encounter Knowledge	Increase parental warmth and interconnectedness through shared racial/cultural experiences and heritage Deliver parenting and familial behaviors with *affection*	Create family tree that includes people, places, and traditions important to the family
Session 2 "We Gon' Be Alright"	Preparation for Bias	Racial Encounter Knowledge	Deliver parenting and familiar behaviors with *protection*	Complete a mock debate examining the importance of preparing youth for discrimination

Table 1 (cont'd)

Session 3 "I Got Enemies, Got a Lot of Enemies"	Promotion of Distrust	Racial Encounter Stress Management	Deliver parenting and familial behaviors with *correction*	Practice racial storytelling and narrative sharing on a racial encounter from the past
Session 4 "Does It Matter if You're Black or White?"	Egalitarianism	Racial Encounter Stress Management Coping	Deliver parenting and familiar behaviors with *connection*	Role-play responses to egalitarian messages in various settings
Session 5 "Ain't No Stopping Us Now"	Applied Skills	Racial Encounter Stress Management Coping	Deliver skillful parenting practices with affection, protection, correction, and connection	Integrate four tenets of RS for increased competencies
Post-test	Post-Intervention Assessments			

Note: RS = Racial Socialization

According to a mixed-methods, one-group design study, EMBRace has the potential to develop sufficient coping skills to reduce psychosocial problems in Black American adolescents, even in the face of more encounters with racism (Anderson et al., 2017; 2018b). From this original pilot study, there exists a substantial cache of video, audio, and interview data that can continue to lend an evidence-base for this intervention. Additionally, the future directions section states that this study had promising results that can inform a study with a larger sample size. In response to this future research, a quantitative study was conducted to support the aims and outcomes of the EMBRace pilot implementation.

Purpose of the Present Study

The purpose of the present study is to elucidate the relations between discrimination stress, general stress, and parental racial worry for Black parental factors on their racial socialization competency and child behavior outcomes. The purpose of the quantitative method of this study is to illuminate the predictive relations between these variables. More specifically, the present study aims to compare the predictive powers of general stress against racial discrimination stress to determine which is more closely aligned with the construct of racial worry for children, a concept rarely explored in the literature. Further, racial worry for children was explored as a predictor for the four different constructs which comprise RS competency. Lastly, child behavior problems was explored as an outcome of the previously listed relations between constructs. Critical race theory calls on researchers and practitioners to work to elevate the voices of the racially marginalized to work towards liberation.

There is much to be gained from a study like this one. From a theoretical perspective, this study aims to clarify the connections between specific factors related to parental racial worry, racial socialization competency, and child outcomes, several constructs captured in RECAST

(Anderson & Stevenson, 2019a). This racial-stress specific coping theory is a recent evolution in the theories that drive psychologists' understanding of these processes in Black families. Thus, this study is one of many research efforts to clarify and test this theory for its utility in guiding RS research and practice. From a practical perspective, the architects of RECAST, as well as the author of this proposed study, hope that the empirical pursuits related to RECAST have real, tangible benefits for Black families. The literature is very clear that RS plays a positive, protective role in Black families with benefits for caregivers and children. By deepening our understanding of the minutiae of these processes, psychologists can fine-tune supports and interventions for RS all with the end goal of serving Black families to improve child and family outcomes. That is the exact purpose of the present study. Though this study involves higher-order statistical modeling and is removed from the activities of the EMBRace program itself, the results and discussion of the proposed study can have far-reaching implications that benefit Black families and children, in much the same way the EMBRace intervention informed the quantitative survey used for this study.

Research Questions

The following research questions were examined within this dissertation, utilizing structural equations modeling and the examination of correlations and regressions within the overall SEM. Question one addresses the construction, fit, and trimming of the SEM; exploratory and confirmatory factor analyses were also conducted in pursuit of this research question. Questions two through four address individual latent variable relations within the overarching model. Specific hypotheses and corresponding rationales are provided in Chapter III: Method.

Research Question 1

Does the a priori theorized model supported produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?

Research Question 2

Within the SEM model, are self-reported parent stressors—both general and racialized—related to self-reported racial worry for their children?

Research Question 3

Within the SEM model, does self-reported parental racial worry significantly influence the self-reported racial socialization competency of Black parents?

Research Question 4

Within the SEM model, are each of the four constructs of self-reported racial socialization competency significantly associated with parent-reported child behavior outcomes?

CHAPTER III: METHOD

Methodology

The methodology for this study is structural equation modeling (SEM), a statistical modeling approach that combines measurement models for latent variables (e.g., established via CFAs) and path modeling. This method allows for the examination more complex models than would be possible with multiple regression (Garson, 2015; Gunzler et al., 2013; Kline, 1998; Iacobucci, 2008). The SEM for this study included eight latent variables, modeled based on theory and previous research. Procedures included psychometric analyses of multiple instruments to prepare an SEM with adequate fit (research question 1) to be used to address research questions 2, 3, and 4.

Data Source

The extant data set used in the present study was the product of an extensive survey completed by 361 Black caregivers. These data were originally collected by two post-doctoral fellows, Drs. Riana E. Anderson and Shawn T. Jones, and Professor Howard Stevenson in the Graduate School of Education at the University of Pennsylvania, following the approval of the institution's Internal Review Board. With the permission of the investigators from the original study, these data were used in the present study (secondary data analysis) to test the proposed Structural Equation Model (SEM) and associated research questions. The original study sought to collect input from parents of Black children on a wide selection of factors including parent wellbeing, racial socialization practices, and racial socialization competency. Together, these eleven experimental and published measures comprised the 186-item online Racial Socialization Competency (RSC) Survey. The RSC Survey was administered to Black caregivers across the US via the Qualtrics survey platform. The current study utilized the responses of parents on five

different measures to gain a deeper understanding of the relationships between parental racial discrimination stress, racialized worry for children, racial socialization (RS) practices, RS competency, and child behavior problems. Individual items from these five instruments were used to form latent variables that represent these constructs. Prior to the decision to use this extant data for the present study, the circumstances around its design and collection were examined for any "bias in favor of White supremacy and the racial status quo" (QuantCrit; Crawford et al., 2019, p. 128). Communication with the original investigators who generated this data set revealed that the data were collected to gain deeper understanding of a wide range of factors for Black families for the purpose of informing empirical investigations into associated psychological assessment and intervention. Given that the purpose of this research program is to inform accurate theory about Black families and refine existing supports and interventions for Black families, I note that this is antithetical to White supremacy.

Participants

Participants in this study were 361 Black caregivers. Caregivers were recruited through three methods: (a) Amazon's mechanical Turk, (b) Qualtrics Panel Management, and (c) email listservs for organizations with a focus on the interests of the Black community or parenting. In keeping with the original study's focus on adolescent development, participants were instructed to complete the survey with their oldest child under 18 in mind. This sample of caregivers was predominantly self-identified as female (72.3%) with the rest self-identifying as male (27.7%; see Table 2). The 361 Black participants belonged to many different ethnic groups; a selection (N=142) of the ethnic identities of caregivers is summarized in Table 3; 219 respondents did not answer this ethnicity-specific question. Table 4 summarizes the ages of caregivers, organized into ranges. The youngest caregiver age was 19 years, the oldest age was 68 years, and the mean

age of all caregivers was 37.8 years of age (*SD* = 10.33); two participants declined to answer this question.

Two measures of socioeconomic status were collected: (a) highest level of education attained and (b) approximate annual household income. Approximately one third reported having a high school education and nearly one third indicated that they earned a bachelor's degree. Nearly 20 percent of caregivers in the sample indicated that they had attained post-graduate education (see Table 5). Two caregivers declined to answer the question about educational attainment. Nearly 85% of the sample reported annual household earnings below $100,000 (see Table 6).

Table 2. Caregiver Demographics by Gender and Role

Caregiver Type	*N*	Percentage (%)
Mother	242	67
Grandmother	10	2.8
Step-mother	5	1.4
Aunt	1	0.3
Other Guardian	3	0.8
Total Female	261	72.3
Father	92	25.5
Step-father	4	1.1
Uncle	1	0.3
Other Guardian	3	0.8
Total Male	100	27.7
GRAND TOTAL	361	100

Table 3. Ethnic Identity of Caregivers

Ethnic Identity	*N*	Percentage (%)
Black/African American	126	88.7
Black/Caribbean	5	3.5
Black/African	4	2.8
Biracial/Multiracial	7	4.9
Total	142	100

Note: Only 142 participants chose to identify ethnic identity in addition to racial identity, while 361 identified their racial identity as Black. Thus, this breakdown of ethnic identities can *project* the ethnic make-up of the analytic sample, while the full ethnic make-up of the sample is unavailable.

Table 4. Ages of Caregivers

Age Range	*N*	Percentage (%)
19-24	23	6.4
25-29	54	15.0
30-34	72	20.1
35-39	81	22.6
40-44	51	14.2
45-49	35	9.7
50-54	17	4.7
55-59	9	2.5
60-64	7	1.9

Table 4 (cont'd)

65+	10	2.8
Total	359	100

Table 5. Highest Education Level of Caregivers

Highest Education Level	*N*	Percentage (%)
Middle School	2	0.6
High School	106	29.5
Vocational/Technical School	26	7.2
Community College/Associate Degree	52	14.5
College/Bachelor's Degree	102	28.4
Master's Degree	47	13.1
Advanced/Professional Degree (e.g., MD, PhD, JD)	24	6.7
Total	359	100

Table 6. Annual Household Income of Caregivers

Income Range	N	Percentage (%)
$0-$24,999	55	15.3
$25,000-$49,000	115	31.9
$50,000-$74,999	82	22.8
$75,000-$99,000	54	15.0
$100,000-$124,999	13	3.6
$125,000-$149,999	18	5.0
$150,00-$174,999	6	1.7
$175,000-$199,999	2	0.6
$200,000 and up	15	4.2
Total	360	100

Demographics for caregiver's oldest child under 18 years of age were also recorded. The youngest was one year, the oldest was 18 years old, and the mean age was 9.4 years (*SD* = 5.13). The ages were evenly distributed, as demonstrated in Table 7 below. Gender identity was also collected; 47.6% of the children represented were female, 51.8% were male, and 0.6% were transgender or non-binary. Prior research with this dataset demonstrated that there were no demographically related variables that bear significant weight on the variables of interest; that is RS is not dependent on demographics, nor are externalizing or internalizing outcomes (Anderson et al., 2020).

Table 7. Demographics for Children Represented in the Survey

Age		*N*	Percentage (%)
	1 – 3	61	16.9
	4 – 6	55	15.3
	7 – 9	58	16.1
	10 – 12	63	17.5
	13 – 15	67	18.6
	16 – 18	56	15.6
	Total	360	100.0
Gender			
	Cisgender Female	172	47.6
	Cisgender Male	187	51.8
	Trans/Non-binary	2	0.6
	Total	361	100.0

Measures

The RSC Survey consists of eleven measures constructed by a research team at the University of Pennsylvania and used for the online data collection. Some of the rating scales had been previously published alongside their psychometric properties, while others were created by the research team at the University of Pennsylvania and are currently under psychometric investigation. For this study, the Worries About Racial Profiling Scale (WARP; Stevenson & Winn, 2016); Racial Socialization Competency Scale (RaSCS; Anderson et al., 2020); Perceived Stress Scale (PSS-10; Cohen & Williamson, 1988); Racism and Life Experiences Scales, Brief

(RaLES-B; Harrell et al., 1997); and Brief Problem Monitor/6-18 (BPM/6-18; Achenbach et al., 2011) was used to inform the proposed model. See Table 8 for a list of these measures.

Background information (e.g., psychometric properties, item details, Likert scale anchors) is provided for each of the five instruments below. Following that section, the process for identifying specific items to become indicators for latent variables in the SEM is outlined in a subsection titled *Latent Variable Indicator Selection and Final Composition.*

Table 8. List of Measures Use in the Present Study

Measure Name		Broad Construct	Study Use
Worries About Racial Profiling Scale	WARP	Parental Racial Worry	1 latent variable
Racial Socialization Competency Scale	RaSCS	Racial Socialization Competency	4 latent variables
Racism and Life Experience Scales, Brief	RaLES-B	Racial Discrimination	1 latent variable
Perceived Stress Scale, Ten Item	PSS-10	Present Stress levels	1 latent variable
Brief Problem Monitor, Parent Form	BPM-P/6-18	Child Behavior Problems	1 latent variable

Background Information for Study Measures

Worries About Racial Profiling Scale. The Worries About Racial Profiling Scale (WARP; Stevenson & Winn, 2016) is a 22-item Likert scale measure designed to assess parental worries related to race. Parents are asked, on a scale of one to five, to indicate how worried they are regarding their child's racialized encounters with others in public spaces when they are not

present. Decades of previous research into Black parents' concerns and worries for their children informed the development of this instrument (Anderson et al., 2021b; Fagan & Stevenson, 2002; Stevenson & Abdul-Kabir, 1996; Stevenson et al., 2001, 2002). The 5-item Likert scale is as follows: 1 = "not at all worried," 2 = "not very worried," 3 = "somewhat worried," 4 = "very worried," and 5 = "extremely worried." Items feature school/education concerns (e.g., "…teachers will withhold instruction from your child because of their race"), criminal justice concerns (e.g., "…if your child is stopped by the police that they will be physically harmed"), impact on parent (e.g., "…fears about racial injustice toward your child will interrupt your sleep or concentration"), and concerns about child reproducing racism (e.g., "…my child will use a racial slur against someone of their own racial background"). Individual item scores were average to determine a mean overall score. Authors of previous research with the same analytic sample for the present study found high internal consistency derived from the total score (α = 0.95; Anderson et al., 2021b). See Appendix A for the full set of items.

Racial Socialization Competency Scale. The Racial Socialization Competency Scale (RaSCS; Anderson et al., 2020) is a 27-item measure of racial socialization competency. This theoretically derived instrument was a unique contribution to the measurement of racial socialization because of its focus on competency rather than frequency or content of RS messaging. Further, three RS Competency subtypes were hypothesized by these authors, but RS competency has been largely treated as monolithic in the past. In the instructions, parents were prompted with three statements, "I believe I can," "I am/would be prepared to," and "I am/would be stressed to," which correspond to the RS competency constructs of confidence, skills, and stress, respectively (Anderson et al., 2020). Parents are asked to answer each of the 27 questions for each area of RS competency. To reflect the action-oriented nature of RS, all items begin with

"Teach" or "Share" (e.g., "Teach my child to speak up if someone of the same race uses a skin color slur against them"). This Likert-scale instrument asks parents to rate their beliefs on a scale of one to five, with one reflecting feeling the least stressed, confident, and prepared. For example, an endorsement of one on the stress subscale would correspond to "I am/would not be stressed to…" while an endorsement of five would correspond to "I am/would be greatly stressed to…" On this measure, parents respond to each of the 27 items with each of the three statements outlined above, for a total of 81 unique items (Anderson et al., 2020). Please see Appendix B for a reproduction of the measure.

Factor Analysis. Anderson and colleagues (2020) conducted both exploratory and confirmatory factor analyses in pursuit of empirical validation of the RaSCS. The original RaSCS was composed of 28 items designed to assess the three constructs which underlie RS competency according to RECAST: stress, skills, and confidence. As hypothesized by the architects of the RaSCS, several composite constructs emerged in factor analyses instead of one overarching concept of RS competency. Further, factor analysis results indicated that while RS confidence and RS skills were each maintained as constructs, the best fitting representation of RS competency *stress* was as two factors, one specifically for RS messages encouraging children to speak up in the face of adversity ("call to action"), and another factor for all other items. Following the first publication in support of its factor structure and psychometric qualities (Anderson et al., 2020), one item was dropped, and four factors were put forth: (a) confidence, (b) skills, (c) stress-general, and (d) stress-"call to action". These four factors serve as endogenous, or downstream, variables in the proposed structural equations model for the present study.

Perceived Stress Scale. The original Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) is a 14-item global measure of perceived stress. The PSS-14 was designed to capture the extent to which life experiences are appraised as stressful within the last month. It is scored by summing the negative items with reverse-coded positive items. A 5-item Likert scale is used to rate items; 0 = "never," 1 = "almost never," 2 = "sometimes," 3 = "fairly often," and 4 = "very often." A 10-item version of the PSS was published four years later based on a factor analysis with a sample of 2,387 that found the 10-item version to be more psychometrically robust (Cohen & Williamson, 1988).

The PSS has undergone thorough validity and reliability testing in the literature. Lee (2012) conducted a review of 19 studies examining the psychometric properties of the PSS, and found strong internal consistency, satisfactory test-retest reliability up to one month, and a frequent finding of a two-factor solution. Lee (2012) found that test-retest reliability past one month, criterion validity, and known-groups validity all deserved further attention in the literature. The concluding recommendation was that the PSS-10 be used to measure perceived stress in both practice and research, rather than the original 14-item measure or the quick 4-item screening version of the measure (Lee, 2012).

As of 2012, eleven studies had examined the psychometric properties of the PSS-10, specifically (Lee, 2012). Cronbach's alpha values for internal consistency ranged from .74 to .91 in the literature. Further, several studies examined factorial validity. Several studies utilized exploratory factor analysis to examine the factor structure of the PSS-10 with various populations. Six studies found that a 2-factor solution explained 50% of the variance, while two studies found that a 1-factor solution was a better fit for explaining 50% of the variance. Four studies examined the PSS-10 for test-retest reliability. Findings suggest that test-retest reliability

(1 week (N=2), 2 weeks (N=1), and 4 weeks (N=1) was moderate to strong (r = .72 to .88; Lee, 2012. Additionally, hypothesis testing in the selected studies revealed moderate to strong correlation with the emotional constructs of depression and anxiety as measured by other instruments (Lee, 2012). Lastly, criterion validity, or how well an instrument compares to a "gold standard" measure of a given metric, was examined in a small number of studies, all of which used questionnaires as the metric of comparison. These correlation coefficients were moderate to weak, with most included studies declining to report their specific values (Lee, 2012). Overall, the literature supporting the PSS suggests moderate to strong psychometric properties, with the PSS-10 having the strongest support of the three published versions of the test. See Appendix C for a reproduction of the measure.

Racism and Life Experiences Scales–Brief. The Racism and Life Experiences Scale-Brief (RaLES-B; Harrell et al., 1997) is a 9-item, Likert-scale measure addressing racist experiences a person has experienced both across the lifespan and during the past year. The measure covers the respondent's experiences, as well as those of their friends, family, and neighbors. The 5-point Likert scale from this measure asked respondents to indicate their endorsement of items on a scale from 1 (not at all) to 5 (extremely) (Harrell, 1995; Harrell et al., 1997; Utsey, 1998). The RaLES-B is designed to yield a total raw core that globally captures experiences with race-based discrimination for an individual, known as the Racism and Life Experiences score (Harrell et al., 1997). Additional research concluded that this instrument was best described as containing two factors, which correspond to a Racism-Group score (4 items) and a Racism-Self score (5 items) (Nadal, 2011; Utsey, 1998). See Appendix D for a reproduction of the measure. With notable exceptions (See Utsey), much of the literature establishing the psychometric properties of the RaLES-B is not published in peer reviewed

outlets (e.g., Harrell, 1995; Harrell, 1997). Thus, exploratory and confirmatory factor analysis were used to determine which items from this scale would best represent the latent factor of parent racial discrimination stress.

Brief Problem Monitor. The Brief Problem Monitor/6-18 (BPM/6-18; Achenbach, McConaughy, Ivanova, & Rescorla, 2011) is a 19-item rating scale designed to be completed by parents, teachers, or youths in a 2-minute time frame to describe functioning over predetermined periods of time. This scale uses a 3-point Likert scale, wherein raters indicate how "true" each statement is; 0 indicates "not true (as far as you know)," 1 indicated "somewhat true," and 2 indicates "very true." For this study, the measure was completed by parents in reference to their oldest child under 18. The BPM/6-18 is one of many measures comprising the Achenbach System of Empirically Based Assessment (ASEBA), which allows behavioral health providers and educators to obtain a snapshot of adaptive and maladaptive functioning. The default norms are based on a U.S. nationally representative sample (Achenbach & Rescorla, 2001).

The BPM-P/6-18 has three subscales, *Internalizing* (INT), *Attention Problems* (ATT), *Externalizing* (EXT) and one *Total Problems* (TOT) scale, all of which yield a scaled score. The *Internalizing* subscale includes items like "unhappy, sad or depressed" (α = .80). Statements such as "inattentive or easily distracted" make up the *Attention Problems* scale (α = .85). *Externalizing* items refer to "temper tantrums or hot temper" and other externalizing behaviors (α = .88). The TOT scale is composed of all items on the instrument and has the most robust internal consistency (α=.92). Thus, the BPM/6-18 has robust internal consistency for both clinical use (Cronbach, 1951) and has been found to be an appropriate tool for research use for Black populations (Anderson et al., 2018b). Further, the BPM-P/6-18 also has strong 8-day test-retest reliability across subscales. The values are r = .81 for INT, r = .83 for ATT, r = .83 for

EXT, and $r = .85$ for the overall TOT score. The 19 items were used to form 19 corresponding indicators for this latent variable. See Appendix E for the items from the measure.

Latent Variable Indicator Selection and Final Composition

Statistical modeling utilized items from the measures described above to create latent variables, based on measurement models, which was connected by theoretical structural paths in the full SEM. Latent variables are informed by specific indicator items. Racial stress and four categories of racial socialization were captured this way. This approach allowed for the conceptualization of variables that are not derived from a specific subscale or total score but are nonetheless of interest in the proposed study.

Parental General Stress

In general, "everyday stress" describes the heightened cognitive, behavioral, and emotional responses to adverse life circumstances, whether major or minor. If these cognitive, behavioral, and emotional responses become negative or maladaptive, they can cross a line from protective (e.g., flight response from dangerous situations) to harmful (e.g., isolation, ruminative cognitive distortions), negatively affecting overall psychosocial functioning. Chronic everyday stress for parents has been theorized to have both direct and indirect effects on child behavior (Williford et al., 2017). Per one theory, stress, and the way parents process it, can affect parenting (negatively or positively) and in turn, potentially influence child behavior (Crnic & Low, 2002). Other research shows that the effects are more direct, with other constructs serving as mediation mechanisms (Crnic et al., 2005). Though the primary predictor for this study is the latent variable of "racial stress," it is important to whether racism-based stress and general life stress have similar or disparate independent predictive relationships with the first endogenous, or dependent, variable in the model (i.e., racial worry for children). Items from the

psychometrically validated PSS-10 was be used to capture this construct in the proposed model; preliminary analyses revealed which items merit inclusion in final SEM testing.

Parental Racial Discrimination Stress

The indicators for the latent variable representing parents' racial discrimination stress were items pulled from the RaLES-B. Racial discrimination stress differs parental racial worry because racial discrimination stress refers to experiences faced by parents and associated negative sequelae. On the other hand, the latter is a largely cognitive construct and emphasizes the fears parents have for their children. Prior literature includes studies that use the RaLES-B total score to represent race-based stress (See Utsey, 1998). While previous research found the presence of two distinct factors, this instrument was still examined with CFAs and EFAs to determine which items would become indicators for this latent variable measurement model.

Parental Racial Worry for Children

Not to be confused with racial anxiety, or self-directed racial worry, racial worry for children concerns the preoccupying thoughts about what racialized behaviors or circumstances a child might be exposed to in a parent's absence. These worries may be related to racialized statements a child may make and experiences a child may face. These concerns can influence the psychological state of parents and might in turn influence parents' perception of their racial socialization competency. Due to the close relations between stress and worry, as well as relations between worry for children and parenting, all items from the WARP were considered for inclusion in this dissertation and included in this latent variable measurement model.

Racial Socialization Competency: Confidence

Six items from the confidence factor of the RaSCS were chosen as indicators for the RSC Confidence latent variable. Hair and colleagues (2009) state that when determining indicators for latent variables, items with an EFA factor loading greater than .50 are considered acceptable, while items with factor loading greater than .70 are considered strong. In the case of the RaSCS, over ten items met these criteria. Thus, in order to keep the number of indicators at a feasible number given the moderate sample size, the items with the six highest factor loadings were retained. The items were 3, 4, 5, 13, 17, and 26. Black parents' self-efficacy for RS was captured most effectively through measuring their endorsement of these items. The prompt for these items is "I believe I can."

Racial Socialization Competency: Skills

Six items from the skills factor of the RaSCS were identified as indicators for the RSC Skills latent variable. Similarly, to the confidence factor, over ten items met the original inclusion criteria set forth by Hair and colleagues (2009; i.e., 0.50 – 0.069 [acceptable], 0.70 and higher [strong]). Items 3, 4, 5, 6, 23, and 26 were retained as indicators for this latent variable reflecting RS Competency-Skills; these six items had the highest factor loadings and thus, were the strongest representations of the underlying construct of RS competency skills. These items represent the RS activities Black parents feel most prepared to do. The prompt for these items is "I am/would be prepared to."

Racial Socialization Competency Stress: General

Five items from the Stress-General factor were selected as indicators for the corresponding latent variable for the proposed study. Though fewer factor loaders were greater than .70, there were still a significant number (Hair et al., 2009). Therefore, the five items with

the highest factor loadings for the RSC stress-general factor were chosen as indicators for this latent variable. Those items were 15, 16, 17, 18, and 24. These items capture the RS activities that Black parents identified as presenting the most potential stress, generally. The prompt for these items is "I am/would be stressed to."

Racial Socialization Competency Stress: Call to Action

The RSC stress-call to action factor had the weakest overall factor loadings, with only four meeting the recommendations from Hair and colleagues (2009; i.e., 0.50 – 0.069 [acceptable], 0.70 and higher [strong]). The four items retained as indicators for this latent variable were 4, 5, 6, and 11. Together, the four items represent the RS activities, related to encouraging their children to speak up in the face of racism, that present the most potential stress to Black parents. As this latent variable draws from the same original subscale representing RSC Stress mentioned above, the prompt for these items is also "I am/would be stressed to."

Child Behavior Problems

There are many child outcomes to be considered when discussing the effects of racism on the family unit. One such area that is studied often in conjunction with racial socialization is conduct or behavior problems in affected youth (Coard et al., 2004). Family stress and resilience research indicates that parent-parent dyad dynamics and parent-child dyad dynamics can both influence child behavior. In the event that a parent is highly stressed or worried, as this model is meant to represent, child behavior may change in response. Thus, the BPM/6-18 was utilized to construct this latent variable. Of note, the BPM/6-18 utilizes a 3-item Likert scale, which is a less sensitive to more nuanced differences than the other 5-item Likert scales included in this study. However, this instrument merits inclusion due to the sufficient sample size of this study (N =

361; Savalei & Rhemtulla, 2013) for detecting smaller effects that may result from less discriminating scales.

Procedures

Steps to Prepare Modeling of Research Questions

Modeling of the research questions was accomplished with SEM. Full SEM involves a measurement portion, outlined above, paired with a structural (path analysis) model. In this case, eight latent variables, each with various psychometrically derived indicators, are modeled together in a sequential path model (see Figure 6). First, all latent variables were tested in individual CFAs, or measurement models—to assure the adequacy of the hypothesized measurement model for each construct. Then, all CFAs were conducted simultaneously for fit, but without paths, as a "master" measurement model. Next, the full model composed of all latent variables and paths was run in pursuit of a well-fitting model. Lastly, the best fitting model was used to answer research questions two through four.

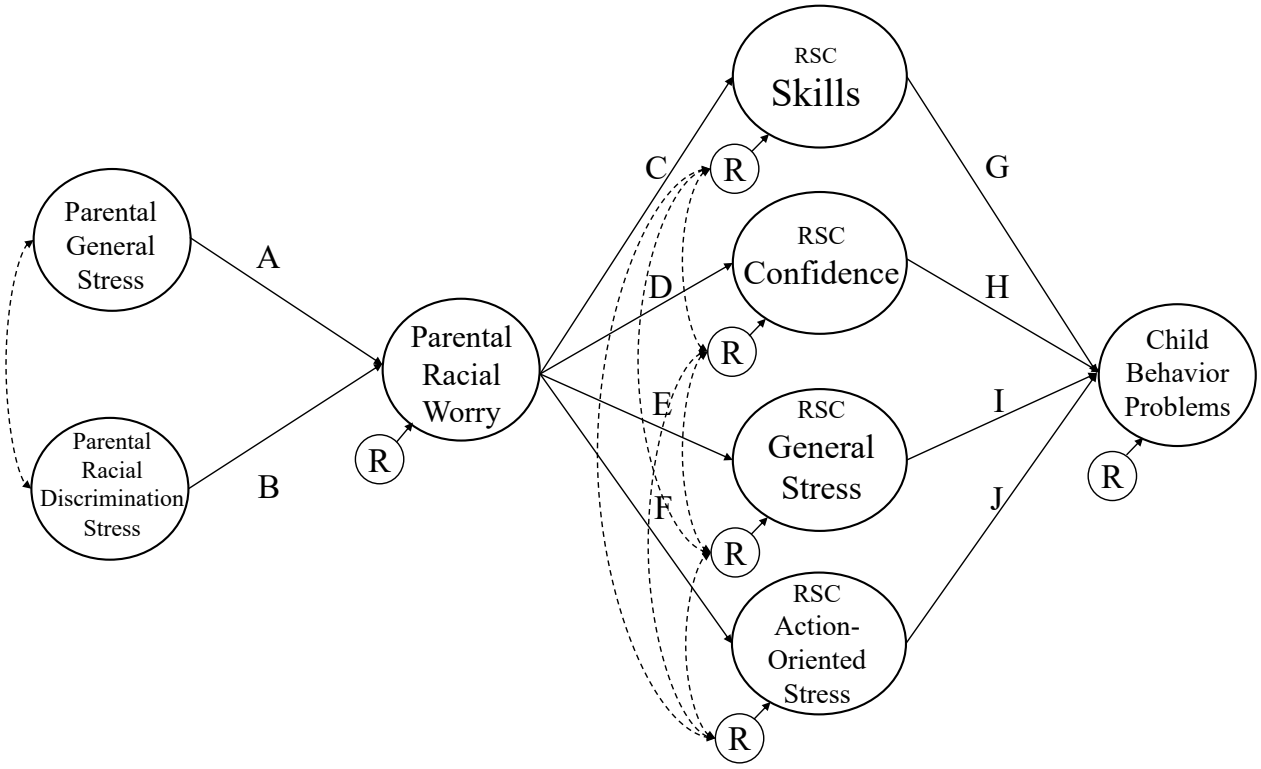
The proposed model for this study examined predictive relations between stressors and racial worry for Black parents. The model situates these considerations as overall predictors for child behavior problems. A parallel mediation component of the model examines differential contributions of sub-types of racial socialization competency to child behavior problems.

Model Structure

In this model, racial stress is hypothesized to predict or be closely associated with parental racial worry. General parent stress is also hypothesized to contribute somewhat to parental racial worry, but to a lesser extent when compared to Racial Stress. Both exogenous variables, and predictor variables, were modeled to help determine if there is differential variance that each contributes to their relations with the variable of Parental Racial Worry.

Parental Racial Worry in turn may influence racial socialization competency. This model seeks to illuminate unique relations between parental racial worry, racial socialization competency sub-types, and child behavior problems. This proposed SEM model was developed to investigate constructs related to RS competency and RECAST, and, to inform the development and refinement of RS interventions for Black youth and families. When parents arrive at EMBRace, they are often looking for coping skills for themselves and their children, as well as competency in RS. This model seeks to quantify the relations between several of these potential targets for intervention.

Figure 5. Full Structural Equation Model for the Present Study



The proposed model for this study was designed to examine predictive relations between stressors and racial worry for Black parents. The model situates these considerations as dueling

predictors for parental racial worry. A parallel mediation component of the model examines differential contributions of sub-types of racial socialization competency from parental racial worry to child behavior problems. In Figure 6, structural SEM paths are depicted with a solid line while covariance paths are depicted with a dashed line. The dashed line represents estimated covariance between the exogenous variables themselves, while the dashed lines in the middle of the model represented covariances estimated between the residuals of the latent variables.

Treatment of Missing Data

To account for missing data, full information maximum likelihood (FIML) was used. FIML is an approach to missing data estimation that allows statistics software to provide parameter estimates in the presence of missing data (Arbuckle, 1996; Finkbeiner, 1979; Collins et al., 2001). Not only does FIML provide data-based parameter estimates, it also "improve[s] the performance of the estimator in terms of power, bias, and efficiency (Graham, 2003)" (Lee & Shi, 2021, p. 467—estimating the values of missing data points). Per previous research, multiple imputation (MI), another leading approach to handling missing data, and FIML generate essentially equivalent results (Collins et al., 2001). Concerns do arise however when the percentage of missing data, or missingness, increases to 50% or more (Lee & Shi, 2021). At 6.6%, the missingness ratio of this dataset falls within the range (<15%) at which FIML and MI have no numerical difference at the second decimal place in parameter estimation (Lee & Shi, 2021). Of note, FIML-based RMSEA is slightly preferable over FIML-based CFI and TLI, but all three fit indices are still valid measurements of model fit when using FIML (Lee & Shi, 2021).

FIML is fully automated within MPlus (Lee & Shi, 2021; Muthén & Muthén, 1998-2017). Importantly, MPlus will only generate covariance estimates from FIML if all necessary

assumptions are met. One case was eliminated from data analyses due to excessive missing data. The final analytic sample size was therefore $N = 360$.

Model Fit

While there are many fit indices available to use, three were chosen for both the measurement models and the full SEM models in this study. These indices include the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the Tucker-Lewis index (TLI). RMSEA values less than or equal to 0.08 constitute acceptable fit, while values less than or equal to 0.06 indicate good fit (Bollen, 1989; Hu & Bentler, 1999; Kenny, 2020). To indicate acceptable fit, both CFI and TLI values must be greater than or equal to 0.90 when using ordinal data (Kenny, 2020; Maccallum et al., 1996; Marsh et al., 2004; Xia & Yang, 2019). The WLSMV-adjusted x^2 was also reported; it was the fit index given the least weight in decision making because the test is almost always significant in the context of large sample sizes (Bollen, 1989). The x^2 difference test, a useful tool for determining which of two competing models is the better fit, was used as part of the SEM model testing process.

Preliminary Data Analyses

MPlus version 8 (Muthén & Muthén, 2010) was used to test the hypothesized model (Figure 6), while the Statistical Package for the Social Sciences (SPSS) version 26.0 was used to clean/organize data and run descriptive statistics, and preliminary statistical analyses including EFAs for the measures (IBM, 2020). MPlus was chosen as the primary data analytic tool due to its flexibility and utility in conducting confirmatory factor analyses, latent variable analysis, structural equation modeling, and power analysis. Variables of interest were isolated from the original, full RSC Survey dataset and imported into an Excel sheet, where it was reformatted into a comma separated value (CSV) format and was imported as a free format data file compatible

with MPlus. All data analyses were conducted on the secured personal computer of the author or on a secure computer in a statistics computer lab on the campus of Michigan State University. This study met criteria for *non-human subjects' research exempt from review* from the Michigan State University Institutional Review Board due to the use of archival, de-identified data.

Consistent with best practices, the reliability and structural validity of all scale scores used in the current work were examined across two trials of factor analyses (Furr, 2017). Exploratory factor analyses (EFAs) and confirmatory factor analyses (CFAs) of individual scales were used to examine measurement validity of all latent variables across the model (Costello & Osborne, 2005; Bollen, 1989). In *Trial 1*, underlying psychometric properties of instruments to be used in this study were examined with CFAs conducted in MPlus 8.0. Notable weaknesses in anticipated factor structure were detected for some measures in Trial 1; these results were consistent with poor overall model fit. *Trial 2* included EFAs, which informed the trimming of instrument items to reduce construct irrelevant variance, assure strong unidimensionality, enhance psychometric properties, and ensure a clear, accurate representation of study constructs as latent variables. Finally, CFAs were run to confirm improvements fit informed by EFAs. Thus, Trial 2 included both EFAs and CFAs.

Model Construction, Trial 1

Trial 1 Confirmatory Factor Analyses. In advance of testing the convergence of a full SEM, measurement models were run to examine indicator path coefficients and fit indices. For Trial 1 of measurement model testing, individual confirmatory factor analyses were run for the five instruments which form the latent variables in this model: (a) PSS-10, (b) RaLES-B, (c) WARP, (d) RaSCS, and (e) the BPM. These initial a prior measurement models were based on available guidance from prior literature, which, in some cases, was limited. The RaSCS provided

select items to represent hypothesized mediational latent variables associated with each of the four previously established factors: RSC Skills, RSC Confidence, RSC General stress, and RSC "Call to Action" Stress; all four of these latent variable measurement models were run concurrently to generate fit indices for the Weighted Least Squares Mean and Variance adjusted (WLSMV) estimator was used in these analyses, as previous research demonstrated that it is a more accurate estimator for ordinal data than Maximum Likelihood (ML; Muthén & Muthén, 1998-2017). See Table 9 for a summary of fit index information for Trial 1 CFAs.

Table 9. CFA Fit Information for Trial 1 of Model Construction

Instrument	Latent Factor	No. of Items	RMSEA	CFI	TLI	x^2 (*df*)
PSS	Generalized Stress	10	0.325	0.708	0.624	1358.001 (35)
RaLES-B	Racial Discrimination Stress	9	0.172	0.951*	0.926*	161.903 (14)
WARP	Parental Racial Worry	22	0.163	0.871	0.857	2189.808 (209)
RaSCS (select items)	Racial Socialization Competency	21	0.062*	0.978*	0.975*	429.877 (183)
BPM	Child Behavior Problems	19	0.083	0.946*	0.940*	528.909 (152)

Table 9 (cont'd)

Notes: RMSEA Guideline for Ordinal Data: < 0.06 for good fit; <0.08 for acceptable fit

CFI Guideline for Ordinal Data: > 0.950 for good fit; > 0.900 for acceptable fit

TLI Guideline for Ordinal Data: > 0.950 for good fit; > 0.900 for acceptable fit

**Indicates at least acceptable fit*

Model Construction, Trial 2

Instrument Modification. Results from Trial 1 CFAs found several notable limitations across instruments that warranted additional analyses in advance of testing the full model. The Brief Problem Monitor and RaSCS subscales were not subjected to additional analyses due to both acceptable fit during Trial 1 and robust empirical studies of their psychometric properties. However, the results of this series of CFAs indicated that additional psychometric analyses were warranted for the PSS-10, RaLES-B, and the WARP. EFAs, reliability analyses, and follow-up CFAs were conducted for each instrument in pursuit of a better fitting model—so that selected items from each instrument would form a meaningful, unidimensional latent variable.

Perceived Stress Scale, 10-item. Exploratory Factor Analysis. Despite robust literature supporting its instrumentation, an initial CFA for the PSS-10 (all ten items) indicated poor model fit. To further examine its underlying factor structure, several analyses were conducted. First, inter-item correlation values were extracted to examine the extent to which items were correlated with one another. Results from this inter-item correlation table showed that the reverse-coded items on the instrument were highly correlated with one another (e.g., 0.607) but showed weaker correlation with the typically coded items (e.g., 0.136). See Table 10 for the full inter-item correlation matrix for this measure.

Table 10. Inter-item Correlation Matrix for the Perceived Stress Scale, 10-item

Item #	1	2	3	4	5	6	7	8	9	10
1	1.000									
2	.644	1.000								
3	.629	.657	1.000							
4	.024	.183	.167	1.000						
5	.082	.191	.212	.639	1.000					
6	.548	.579	.571	.085	.069	1.000				
7	.113	.169	.104	.607	.576	.087	1.000			
8	.103	.156	.217	.616	.706	.106	.662	1.000		
9	.563	.514	.567	.048	.063	.548	.087	.057	1.000	
10	.609	.576	.590	.136	.147	.636	.176	.156	.693	1.000

Lastly, to examine strengths and weaknesses across the measure, all items were constrained to one factor and extracted with Principal Axis Factoring. See Table 11 below for item communalities and factor loadings.

Perceived Stress Scale 10-item. Communalities. An examination of the extraction communalities for each item on this instrument revealed a similar pattern as the inter-item correlation matrix. All four reverse-coded items had communalities values lower than 0.2, while the typically coded items all had values above 0.4. In terms of factor loadings for the one-factor solution, pattern matrix values indicated that loadings were all under 0.4 for the four problem items and all above 0.69 for the other six items (see Table 12).

Table 11. Extraction Communalities for the Perceived Stress Scale, 10 item

Item #	Extraction Communalities	Factor Loadings
1	0.534	0.731
2	0.591	0.769
3	0.611	0.782
4*	0.090*	0.300*
5*	0.107*	0.327*
6	0.494	0.703
7*	0.099*	0.315*
8*	0.114*	0.338*
9	0.481	0.693
10	0.628	0.792

Note: * indicates a reverse-coded item

Perceived Stress Scale, 10-item. Item Reduction Analyses. As demonstrated above, a preponderance of data supported the removal of the four reverse-coded items of this instrument for use in this study. Importantly, these findings were consistent with prior literature that isolated a 2-factor solution as the best fitting solution for the 10-item version of this instrument (Lee, 2010). Additional factor analyses were conducted to re-examine the instrument with only the 6 typically coded items. As with the previous EFA, all items were constrained to one factor to determine strengths and weaknesses in the underlying factor structure. The extraction communalities and factor loadings for these 6 items are reproduced in Table 12.

Table 12. Extraction Communalities for Retained Items on the Perceived Stress Scale, 10 item

Item #	Extraction Communality	Factor Loadings
1	0.610	0.781
2	0.598	0.774
3	0.618	0.786
6	0.557	0.747
9	0.560	0.748
10	0.664	0.815

In summation, following thorough examinations of factor structure with exploratory factor analyses, items 4, 5, 7, and 8 were dropped from the latent factor representing parental general stress. Removal of these items is also supported by previous research that found these items to comprise a second factor within the instrument (Lee, 2012).

Worries About Racial Profiling Scale. Exploratory Factor Analysis. Like the PSS-10 and the RaLES-B, the Worries about Racial Profiling Scale (WARP), underwent additional factor structure analyses to refine the indicators for the latent variable of parental racial worry. Initially, the factorability of the 22 WARP items was examined. Several well-recognized criteria for the factorability of a correlation matrix were used. First, it was observed that all 22 items correlated at least 0.3 with at least one another item, suggesting reasonable factorability. Second, the Kaiser-Meyer-Olkin measure of sampling adequacy was .954, above the commonly recommended value of 0.6. Barlett's test of sphericity was significant (x^2 [231] = 5941.191, $p <$ 0.001). Principal Axis Factoring (PAF), also called common factors approach was used for the EFA. The primary purpose was to elicit relations among variables in order to guide a strong conceptual basis for the parental racial worry latent variable in the later SEM. Further, PAF is

more robust to non-normality than the EFA maximum likelihood estimation strategy. Initial Eigenvalues indicated that the first two factors explained 52% and 11% of the variance, respectively. No other factors had Eigenvalues over one. Solutions for two and three factors were each examined via the Promax Rotation with Kaiser Normalization; this rotation method is appropriate when correlations are expected between factors. The three factor solution, which explained 67% of the variance, did provide three conceptually distinct factors. Only the first two factors demonstrated Eigenvalues greater than one, however. In the three-factor solution, factor one represented worries related to racist experiences at school; factor two represented worries that children would be misperceived as threatening in public, and thus exposed to harm; and factor three represented worries that the child themselves would commit racist acts. The two factor solution was highly similar to the three factor solution. Ultimately, the two-factor solution was chosen. In the two-factor solution, factor one (worries about racism at school) and factor two (worries about racist misperception in community) were absorbed into one primary factor that explained 62% if the variance. A total of eight items on the second factor (i.e., 4, 5, 6, 14, 15, 16, 17, 18) of the two-factor solution were removed from the potential measurement model for the parental racial worry variable. The remaining items (i.e., 1, 2, 3, 7, 8, 9, 10, 11, 12, 13, 19, 20, 21, 22) were put forth for CFA testing for inclusion in the later SEM. The latent variable for which these items served as indicators represents racial worry for children related to racist misconceptions, including school, the community, and social settings.

Table 13. Worries About Racial Profiling Scale EFA Pattern Matrix

	Factor	
WARP Item	1	2
21	0.854	
8	0.851	-0.105
9	0.839	-0.252
13	0.831	
7	0.811	
22	0.793	
12	0.791	
20	0.787	
2	0.734	
10	0.724	
1	0.650	
19	0.639	0.226
11	0.630	0.195
3	0.551	0.218
18	0.454	0.294
14	0.420	0.357
6	-0.156	0.938
5	-0.119	0.854
16		0.853
4		0.800

Table 13 (cont'd)

17	0.117	0.618
15	0.256	0.538

Racism and Life Experiences Scale-Brief. Exploratory Factor Analysis. Initially, the factorability of all 9 items on the RaLES-B was examined. The same criteria used in the WARP EFA were used here: (a) item correlations of at least 0.3, and the KMO measure of sampling adequacy (KMO = 0.841), and (c) the Barlett's Test (x^2 [36] = 1131.392, p-value < 0.001). This sample satisfied all three criteria for the RaLES-B just as it did for the WARP. Principal Axis Factoring was again used. Initial Eigenvalues indicated that the first two factors explained 43% and 15% of the variance, respectively. The two factor solution was further examined with the Promax Rotation with Kaiser Normalization, to allow for correlation between factors. Items 3, 5, and 6 were eliminated following a review of factor loadings from the pattern matrix (Table 14 Items 5 and 6 were better represented by the second factor, while item 3 demonstrated a split loading across both factors. Further, conceptual differences were detected between factors. Factor 1 (i.e., items 1, 2, 4, 7, 8, 9) represented experiences and memories related to personal experiences with racism, while items 3, 4, 5 covered public regard and opinions on the experiences of others (Harrell, 1997; Utsey, 1998). Items 1, 2, 4, 7, 8, 9, which represent individual experiences with racism and associated stress, were chosen for the Parental Racial Discrimination Stress latent variable.

Table 14. Racism and Life Events Scale, Brief EFA Pattern Matrix

	Factor	
RaLES-B Item	1	2
2	0.850	-0.238
1	0.836	-0.139
8	0.777	
9	0.666	
7	0.572	0.317
4	0.527	0.114
5	0.199	-0.635
3	0.245	0.445
6		-0.290

Note: Extraction method: Principal Axis Factoring; Rotation method: Promax with Kaiser Normalization

Confirmatory Factor Analyses. A second trial of CFAs was conducted to further characterize the measurement model of the proposed study, and guide additional adaptations and trimming if necessary. The two instruments that underwent a second set of CFAs were the item-reduced PSS and the item-reduced WARP. At this stage of preliminary data analyses, additional psychometric evaluation via CFA of the RaSCS was also conducted. At this stage, because each instrument had been modified (i.e., items reduced to assure the assessment of only a single factor or construct), the constructs of interest were the latent variables themselves, rather than entire measures.

Parental General Stress. Trial 2 Confirmatory Factor Analysis. The construct of generalized parental stress is composed of items from the PSS-10. The full sample (N = 360) was used to determine whether the adjustments made to the PSS-10 were sufficient in improving model fit as evidenced by improvement in CFI and TLI model fit indices. Simulation studies revealed that RMSEA values are often artificially inflated with simpler models with few degrees of freedom (Kenny et al., 2015). Despite these observed issues, the RMSEA is reported here for the sake of consistency with usual SEM procedure reporting. Notably, the 6-item, one factor solution showed good fit (RMSEA = 0.114 [0.084 – 0.145], CFI = 0.989, TLI = 0.981) in the CFA. These values are a stark improvement over the previous one factor solution CFA, (RMSEA = 0.325; CFI = 0.708, TLI = 0.624, which contained the additional items that introduced necessary, construct-irrelevant variance—and thereby, compromising fit of the measurement model. See Table 16 for additional detail.

Parental Racial Worry. Trial 2 Confirmatory Factor Analysis. The latent variable of parental racial worry is composed of indicators from the Worries about Racial Profiling Scale (WARP), which was completed by the full sample of 360 parents. Prior to adjustments, a CFA for the WARP indicated poor fit, RMSEA = 0.163, CFI = 0.871, TLI = 0.857. New analyses, which involved the reduced set of items, indicated moderate improvements in model fit (RMSEA = 0.143 [0.133 – 0.153), CFI = 0.953, TLI = 0.944). While the RMSEA remains low for acceptability, the fit indices were determined to have improved enough for inclusion in the full structural equations model.

Racial Socialization Competency. Trial 2 Confirmatory Factor Analysis. To further identify potential weaknesses in the measurement model for the Racial Socialization Competency terms, individual CFAs were run for each of the four latent factors derived from

that instrument. Due to low degrees of freedom for each subscale, the RMSEA was not used to examine fit for these analyses. Rather, CFI and TLI were weighted more heavily as indices for fit decisions. All four measurement models indicated acceptable model fit (see table 15), with the factors isolated from the RaSCS demonstrating excellent fit. Thus, each set of indicators met inclusion criteria to serve as indicators for the racial socialization competency latent factors in the full SEM. The complete set of fit indices from the results of the Trial 2 CFAs are reported for each instrument in Table 15.

Table 15. Individual Measurement Model Results for the Current Study

Instrument	Latent Factor	No. of Items	RMSEA (90% CI)	CFI	TLI	x^2 (*df*)
PSS	Parental General Stress	6	0.114 (0.084-0.145)	0.989**	0.981**	50.527 (9)
RaLES-B	Parental Racial Discrimination Stress	6	0.177 (0.148-0.207)	0.965**	0.941*	110.056 (9)
WARP	Parental Racial Worry	14	0.143 (0.133-0.153)	0.953**	0.944*	636.486 (77)
RaSCS	Racial Socialization Competency					
Skills		6	0.182 (0.153-0.213)	0.975**	0.958**	113.343 (9)

Table 15 (cont'd)

	Confidence		6	0.116 (0.086-0.148)	0.992**	0.987**	51.549 (9)
	Stress – General		5	0.051**	0.998**	0.996**	5
	Stress – Action		4	0.089 (028-0.161)	0.997**	0.992**	7.558 (2)
Brief Problem Monitor	Child Behavior Problems		19	0.083 (0.076-0.091)	0.946*	0.940*	528.909 (152)

Notes: RMSEA Guideline for Ordinal Data: < 0.06 for good fit; <0.08 for acceptable fit

CFI Guideline for Ordinal Data: > 0.950 for good fit; > 0.900 for acceptable fit

TLI Guideline for Ordinal Data: > 0.950 for good fit; > 0.900 for acceptable fit

**Indicates at least acceptable fit*

***Indicates good fit*

Measurement Model

When the individual measurement model components were run, acceptable or better fit was observed across models. All the models were then run together, simultaneously, in a "master" measurement model. Note that this is *not equivalent to* testing the full hypothesized SEM for the study, because the paths between latent variables are not specified in this version of the model. Fit indices were examined independent of the individual measurement models to assess how well the latent variable models fit together. Model fit for the master measurement

model was tested using the RMSEA, CFI, and TLI described above. Results indicated clearly good fit: RMSEA = 0.037 (0.034- 0.049), CFI = 0.960, TLI = 0.958, Chi-square =3045.234 (*df* = 2051). Thus, the latent variables represented in this master measurement model were promoted further in the process for model testing. In the Results chapter, this master measurement model will be referred to as Model A, to differentiate it from other iterations of the more complete SEM model in this study. Further examination of the model included a review of the standardized beta loadings (i.e., factor loadings in this measurement-model context) that represent the relationships between individual indicators and latent variables. The standardized beta loadings for Parental General Stress (β range = 0.780 – 0.861), Parental Racial Discrimination Stress (β range = 0.625 - 0.857), Parental Racial Worry (β range = 0.712 - 0.884), RSC Confidence (β range = 0.685 - 0.939), RSC "Call to Action" Stress (β range = 0.518 - 0.791), and Child Behavior Problems (β range = 0.639 - 881), were all above 0.5, putting all within acceptable limits (i.e., > 0.4). See Figures 6, 7, 8, 9, 10, 11, 12, and 13 for the figures of all measurement models for all latent variables in this study. Tables 16, 17, 18, 19, 20, 21, 22, and 23 contain the standardized path coefficients, standard errors, and *p*-values associated with each measurement model.

Figure 6. Measurement Model for Parental Racial Discrimination Stress Latent Variable

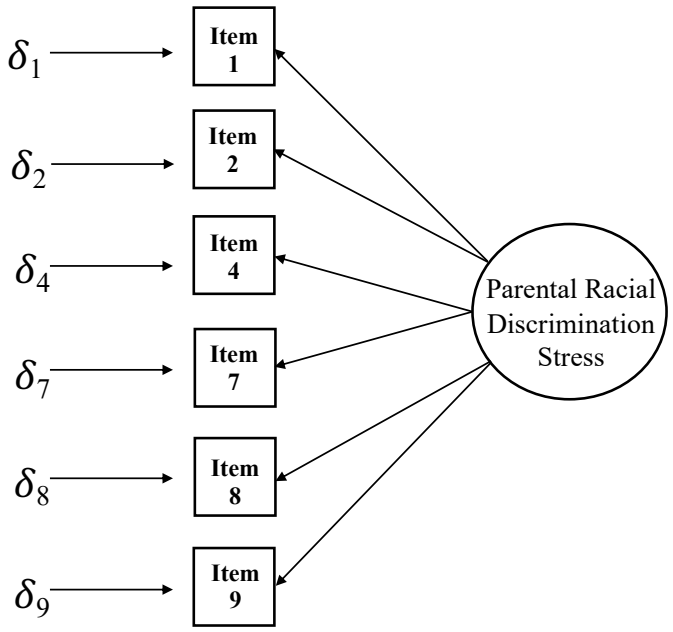


Table 16. Path Estimate Information for Parental Racial Discrimination Stress Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
1	0.803	0.026	0.000
2	0.822	0.030	0.000
4	0.621	0.041	0.000
7	0.675	0.036	0.000
8	0.859	0.025	0.000
9	0.779	0.028	0.000

Figure 7. Measurement Model for Parental General Stress Latent Variable

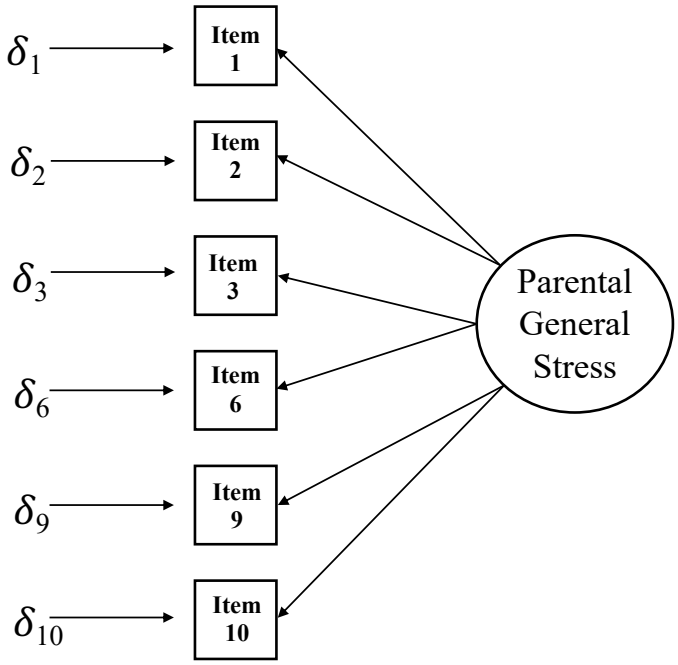


Table 17. Path Estimate Information for Parental General Stress Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
1	0.795	0.026	0.000
2	0.801	0.027	0.000
3	0.800	0.027	0.000
6	0.847	0.024	0.000
9	0.785	0.028	0.000
10	0.877	0.021	0.000

Figure 8. Parental Racial Worry Measurement Model

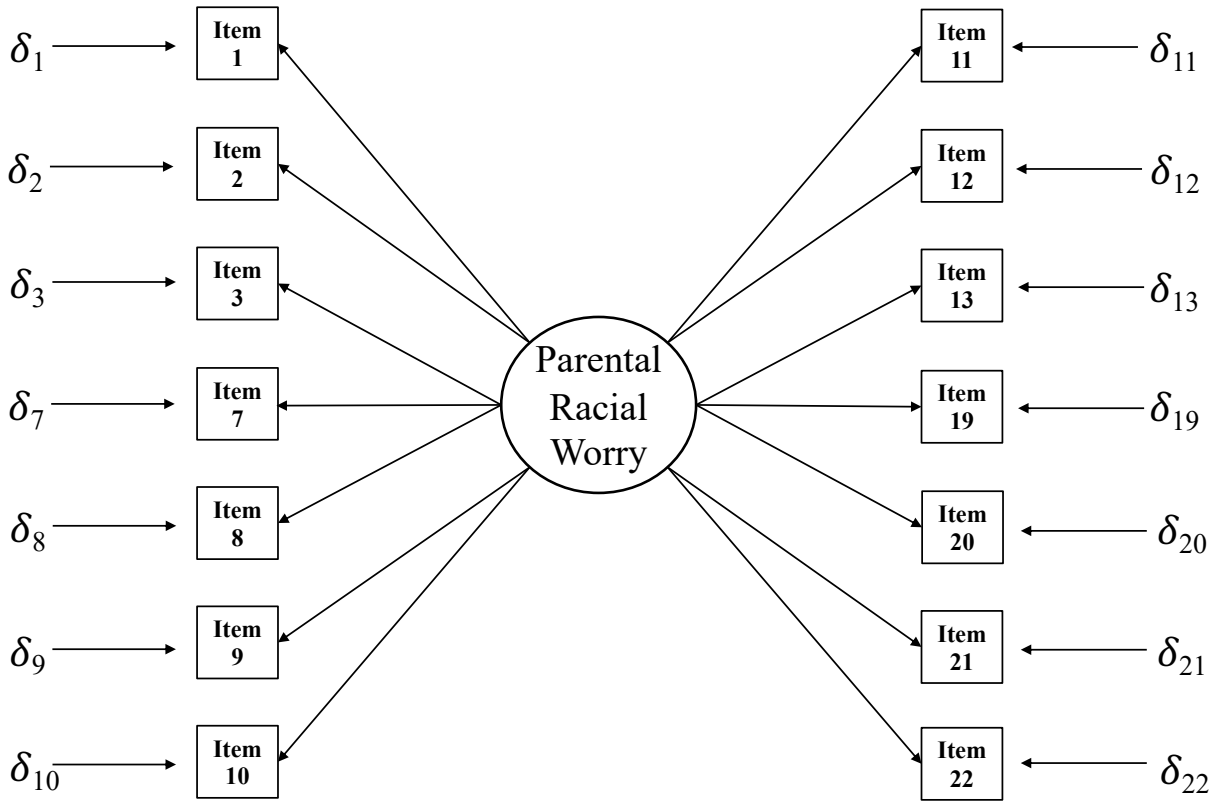


Table 18. Path Estimate Information for Parental Racial Worry Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
1	0.722	0.027	0.000
2	0.741	0.025	0.000
3	0.760	0.024	0.000
7	0.834	0.017	0.000
8	0.818	0.019	0.000
9	0.727	0.026	0.000
10	0.808	0.019	0.000
11	0.812	0.021	0.000
12	0.879	0.015	0.000
13	0.841	0.017	0.000
19	0.853	0.016	0.000
20	0.805	0.021	0.000
21	0.888	0.013	0.000
22	0.883	0.013	0.000

Figure 9. Measurement Model for Racial Socialization Competency Confidence Latent Variable

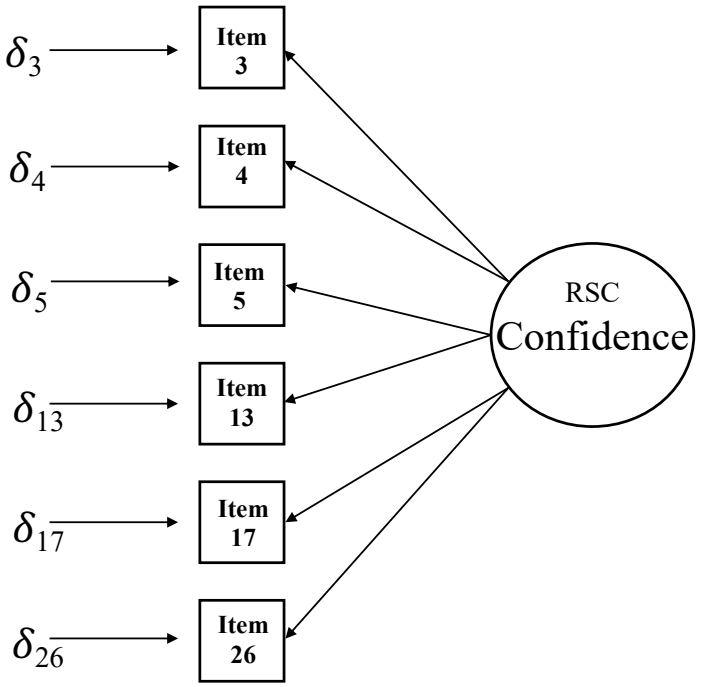


Table 19. Path Estimate Information for Racial Socialization Competency Confidence Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
3	0.905	0.021	0.000
4	0.937	0.016	0.000
5	0.887	0.020	0.000
13	0.719	0.033	0.000
17	0.833	0.028	0.000
26	0.829	0.028	0.000

Figure 10. Measurement Model for Racial Socialization Competency Skills Latent Variable

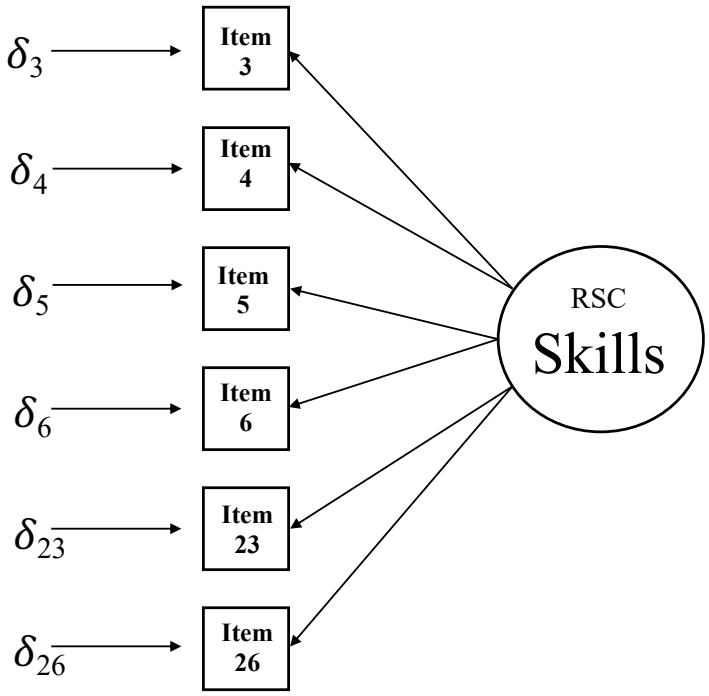


Table 20. Path Estimate Information for Racial Socialization Competency Skills Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
3	0.762	0.030	0.000
4	0.885	0.023	0.000
5	0.835	0.024	0.000
6	0.832	0.023	0.000
23	0.737	0.030	0.000
26	0.788	0.027	0.000

Figure 11. Measurement Model for Racial Socialization Competency General Stress Latent Variable

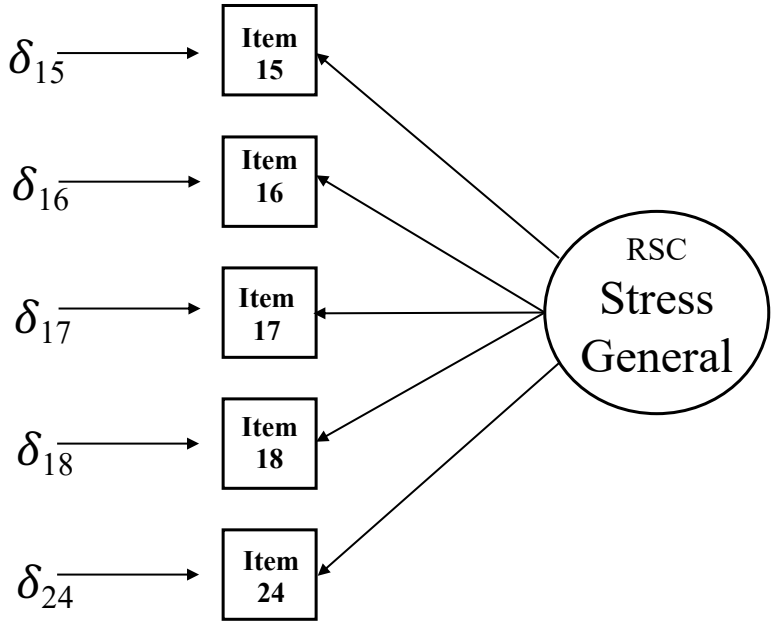


Table 21. Path Estimate Information for Racial Socialization Competency General Stress Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
15	0.786	0.030	0.000
16	0.746	0.032	0.000
17	0.884	0.021	0.000
18	0.796	0.029	0.000
24	0.700	0.034	0.000

Figure 12. Measurement Model for Racial Socialization Competency "Call to Action" Stress Latent Variable

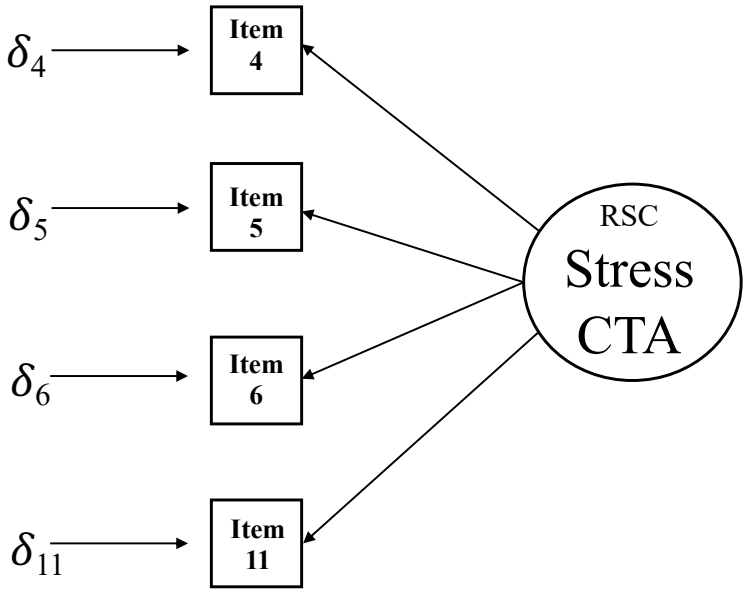


Table 22. Path Estimate Information for Racial Socialization Competency "Call to Action" Stress Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
4	0.843	0.026	0.000
5	0.860	0.026	0.000
6	0.826	0.024	0.000
11	0.608	0.045	0.000

Figure 13. Measurement Model for Child Behavior Problems Latent Variable

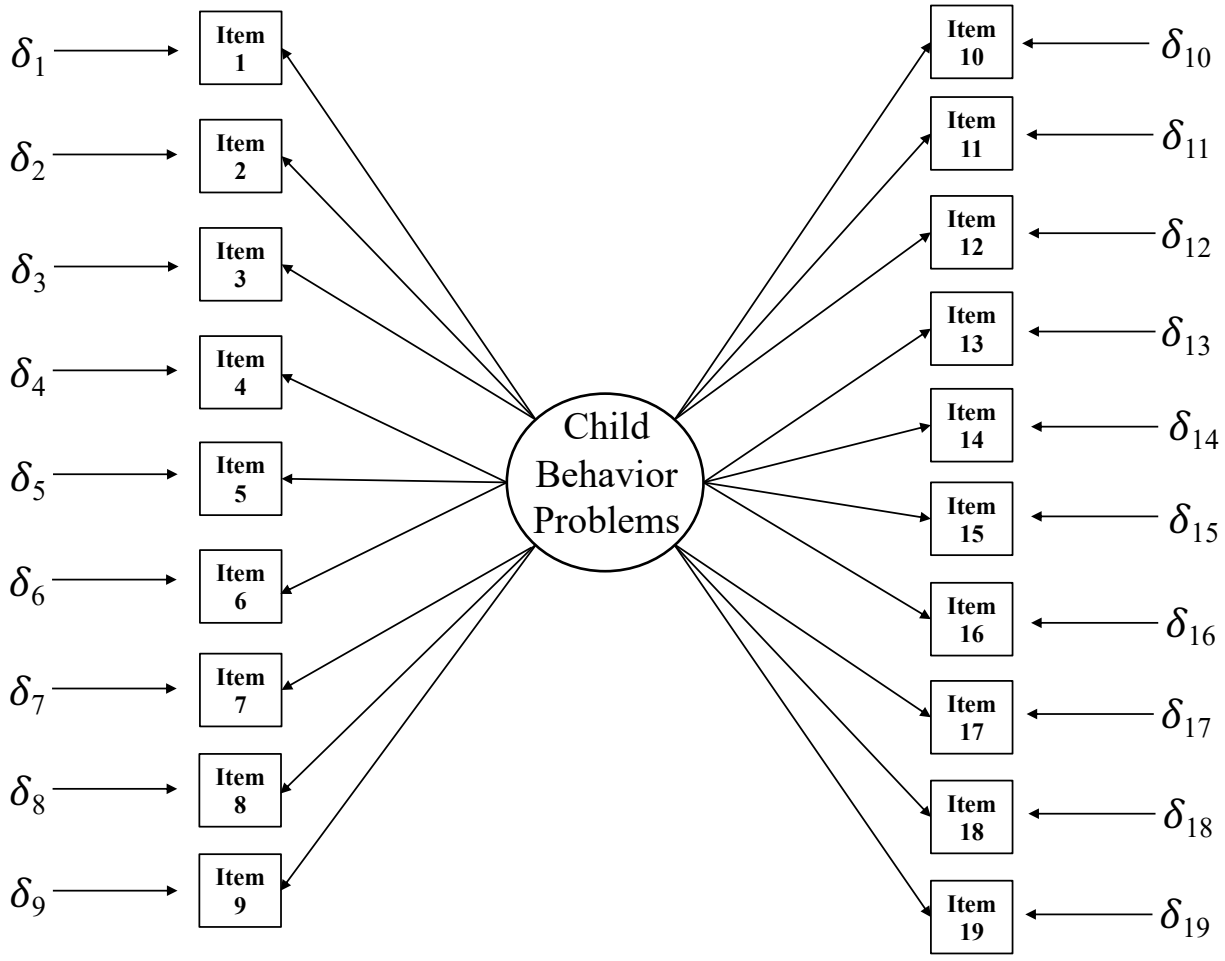


Table 23. Path Estimate Information for Child Behavior Problems Latent Variable Measurement Model

Item #	Path Estimate	S.E.	Two-tailed *P*-Value
1	0.673	0.043	0.000
2	0.731	0.037	0.000
3	0.635	0.041	0.000
4	0.769	0.031	0.000
5	0.707	0.038	0.000
6	0.771	0.037	0.000
7	0.817	0.028	0.000
8	0.800	0.033	0.000
9	0.834	0.033	0.000
10	0.734	0.033	0.000
11	0.790	0.035	0.000
12	0.862	0.033	0.000
13	0.681	0.039	0.000
14	0.760	0.033	0.000
15	0.682	0.037	0.000
16	0.776	0.031	0.000
17	0.896	0.029	0.000
18	0.841	0.029	0.000
19	0.773	0.032	0.000

Testing Hypotheses

All research questions and hypothesis tests were performed in the context of the full SEM. Initially, the overall SEM model was tested for fit and then possible modifications were considered. Following testing of the overall model, additional research questions and associated hypotheses were examined through significance tests for various paths within the overall SEM and, in some cases, by imposing additional model constraints to test for significant differences between elements of the overall hypothesized SEM model.

Research Question 1. Does the a priori theorized SEM model produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?

Hypothesis 1a. The *a priori* SEM model, based on theory, will demonstrate at least adequate fit. The WLSMV SEM estimator will be used to generate model estimates and fit indices (i.e., TLI, CFI, RMSEA). Degrees of freedom, chi-square value, and associated *p*-value will also be reviewed to inform model comparison decisions. The adequacy of model fit will be assessed using model fit standards from Xia and Yang (2019).

Research Question 2. Within the SEM model, are self-reported parent stressors—both general and racialized—related to self-reported parental racial worry for their children?

Hypothesis 2a. Within the SEM model, parent general stress (reflecting everyday life stressors) will show a positive association with parental racial worry. This will be reflected in a positive, statistically significant path coefficient representing the impact of parent general stress on parental racial worry.

Hypothesis 2b. Within the SEM model, parent racial stress (reflecting previous experiences with racial discrimination) will show a positive association with parental racial

worry. This will be reflected in a positive, statistically significant path coefficient representing the impact of parent racial stress on parental racial worry.

Rationale. Masarik and Conger (2017) proposed an expanded family stress model based on economic hardship, but per the authors, can be expanded to a number of other social stressors (Barnett, 2008; Nievar et al., 2014; Simons et al., 2016; White & Roosa, 2012). Their model posits that a previous experience with a stressor creates pressure, then distress, which disrupts parenting. Applied to this context, parents' previous racial discrimination experiences can lead to pressure, shifts in thinking and priorities, or other pressures, which in turn shift aspects of their parenting. This study postulates that excessive racial worry is a product of psychological distress and can disrupt or shift previously adaptive parenting processes.

It is hypothesized that there will be a meaningful relation between racial discrimination stress and racial worry for children. General stress likely contributes some unique variance, but it is hypothesized that racial stress would have a stronger correlation with parental racial worry, due to the racialized nature of both constructs. Broadly**,** stress describes maladaptive psychological, emotional, or behavioral responses to life's pressures and demands that tax one's coping skills. Physiological stress responses can include high blood pressure, increased heart rate, increased sweating, changes in appetite, and changes in sleep. Racial Stress is a conceptualization of racial stress specifically within the family unit. On its own, racial stress is defined as the psychological injury (e.g., negative cognitive, behavioral, emotional responses) that follows experiences with racial discrimination (Franklin et al., 2006). Within the family unit, this stress can influence interfamilial relationships such as parent-parent and parent-child dynamics. Stress and worry are two highly interrelated psychological constructs, with some models predicting them as psychological experiences that inform one another. Therefore, it is

predicted that context-specific (i.e., racial) stress and worry would maintain this link. See Figure 1 for this model.

Hypothesis 2c. Within the SEM model, the association between parental racial stress and parental racial worry will be significantly stronger than the association between parental generalized stress and parental racial worry. This will be reflected in a statistically significant difference (directional) between the two path coefficients wherein the impact of parent racial stress on parental racial worry will be greater than the impact of parental generalized stress on parental racial worry. A two-tailed Wald Test of parameter constraint differences was used to examine this difference and support drawing a statistical inference. This test was used in the context of constraining the variance of each latent factor to 1 and allowing all latent variable indicators to be freely estimated (Muthén & Muthén, 1998-2017). A p-value < .05 would indicate that parental racial discrimination stress is a stronger predictor of parental racial worry than is generalized parental stress.

Rationale. It is hypothesized that parental racial discrimination stress contributes more unique variance to parental racial worry than does parental general stress. Both of these constructs are racialized, suggesting a stronger conceptual link than between a general construct and a racialized construct. In a hierarchical regression study, Pieterse and Carter (2007) found that racism-related stress predicted an additional 4% - 7% of variance in psychological distress in an economically diverse sample of Black men (*N=220*). While this 2007 study confirmed that racism-related distress contributed unique and independent variance to distress, racism-related distress and general stress were not directly compared. However, these findings contain a suggestion that this meaningful difference could be assessed through other methods. This hypothesis predicting statistically significant differential contributions between racism-related

stress and general stress stands on the implications of Pieterse and Carter's (2007) study, and others (e.g., Harrell, 2000; Jones et al., 2020).

Research Question 3. Within the SEM model, does self-reported parental racial worry significantly influence the self-reported racial socialization competency of Black parents?

Hypothesis 3a. Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency confidence. This will be reflected in a negative, statistically significant path coefficient representing the impact of parental racial worry on racial socialization competency confidence.

Hypothesis 3b. Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency *skills.* This will be reflected in a negative, statistically significant path coefficient representing the impact of parental racial worry on racial socialization competency skills.

Hypothesis 3c. Within the SEM, parental racial worry will be positively associated with parental racial socialization competency stress (call to action). This will be reflected in a positive, statistically significant path coefficient representing the impact of parental racial worry on racial socialization competency stress (call to action).

Hypothesis 3d. Within the SEM model, parental racial worry will be positive associated with parental racial socialization competency stress (general). This will be reflected in a positive, statistically significant path coefficient representing the impact of parental racial worry on racial socialization competency stress (general).

Rationale. Notably, there is minimal research on the construct of parental racial worry on which to base this hypothesis. Therefore, the rationale for this hypothesis is drawn from several other bodies of work, starting with research on stress and worry. Both stress and worry can be

natural reactions to stressful life events and circumstances. Similarly, both stress and worry can be elevated into the realm of the maladaptive (Capobianco et al., 2018; Ruscio et al., 2015). Maladaptive levels of worry in particular can contribute to negative psychological and physiological sequelae such as by extending the amount of time it takes individuals to return to baseline (Wells & Mathews, 1994, 1996). While stress and worry are both natural protective reactions to unnatural circumstances of racism, oppression, and the climate surrounding racialized violence, these reactions can reach a point of diminishing returns, contributing to psychological distress (Capobianco et al., 2018), family distress (Masarik & Conger, 2017), and negative health outcomes (Ottaviani et al., 2016). Related to this hypothesis, *excessive* amounts of racial worry, as indicated by abnormally high scores on the WARP, would fall into a categorization of a "maladaptive" response. Thus, it is predicted that high parental racial worry will be correlated with the components of RSC that are posited as being associated with worse outcomes, RSC Stress, divided into two constructs for the purpose of this study: RSC General Stress and RSC "Call to Action" Stress. Notably, a potential challenge exists within the SEM context in terms of isolating the unique variance contributed by each of these latent variables due to the likely substantial high shared variance. Nevertheless, because these two constructs were identified as separate factors in the literature (Anderson et al., 2021), they will be modeled and hypothesized as unique constructs.

Research Question 4. Within the SEM model, are each of the four constructs of self-reported racial socialization competency significantly associated with parent-reported child behavior outcomes?

Hypothesis 4a. Within the SEM model, RSC confidence will be negatively associated with child behavior problems (i.e., higher racial socialization competency confidence will be

associated with fewer child behavior problems). This will be reflected in a negative, statistically significant path coefficient representing the impact of RS competency confidence on child behavior problems.

Hypothesis 4b. Within the SEM model, racial socialization competency skills will be negatively associated with child behavior problems (i.e., higher racial socialization competency skills will be associated with fewer child behavior problems). This will be reflected in a negative, statistically significant path coefficient representing the impact of RS competency - skills on child behavior problems.

Rationale. RECAST postulates that higher levels of RSC confidence and skills are associated with improved outcomes (e.g., psychosocial, physiological, academic, identity) due to the moderating role of RS competency on the relation between racial stress appraisal and racial coping self-efficacy (Anderson & Stevenson, 2019a). Thus, it is hypothesized that the relation between both RS competency confidence and RSC skills will be associated with fewer child behavior problems. Of note, these two constructs, RSC Skills and RSC Competency, share significant conceptual overlap; they are both action-oriented, positively-phrased subcomponents of racial socialization competency (Anderson et al., 2020). Given this, teasing apart their respective unique variance contributions to the model may present challenges.

Hypothesis 4c. Within the SEM model, RSC stress "call to action" will be positively associated with child behavior problems (i.e., higher RSC stress will be associated with more child behavior problems). This will be reflected in a positive, statistically significant path coefficient representing the impact of RSC stress call to action on child behavior problems.

Hypothesis 4d. Within the SEM model, RSC stress general will be positively associated with child behavior problems (i.e., higher RSC stress will be associated with more child behavior

problems). This will be reflected in a positive, statistically significant path coefficient representing the impact of RSC stress general on child behavior problems.

Rationale. Though RS competency subareas are a new frontier in the literature, one can tap into related research to inform the development of hypotheses. In this case, support for rationale can be drawn from scholarship on the influence of general stress for parents on family dynamics. A wealth of research supports the idea that parental stress can interrupt typical, adaptive norms of the household, thus contributing to adjustment challenges for children in the home (Masarik & Conger, 2017; Simons et al., 2016). Specifically related to RS competency stress, Anderson and colleagues (2020) postulated that the stress associated with potential failure in the RS process can lead to avoidance or inconsistency. As decades of research points to many benefits of RS on Black child and adolescent development (Murry et al., 2009; Rodriguez et al., 2008; Stevenson, 1995; Thomas et al., 2010) it is a logical conclusion that RS competency stress on the parent of parents might interrupt these benefits. Given theoretical support for the idea that parental stress interferes with typical family functioning, and stress specifically related to RS competency may interrupt RS efforts and benefits, it is hypothesized that RS competency stress may be associated with more child behavior problems. Of note, there is limited theoretical support for statistical differentiation of RSC general stress and RSC "call to action" stress due to the theoretical novelty of these RSC sub-types. Thus, similarly to the RSC skills and RSC confidence dyad, significant conceptual overlap between the RSC stress terms may present unique modeling challenges. To aid the review of hypotheses in Table 24 below, the hypothesized SEM for this study is reproduced in Figure 14.

Figure 14. Full Structural Equation Model for the Present Study

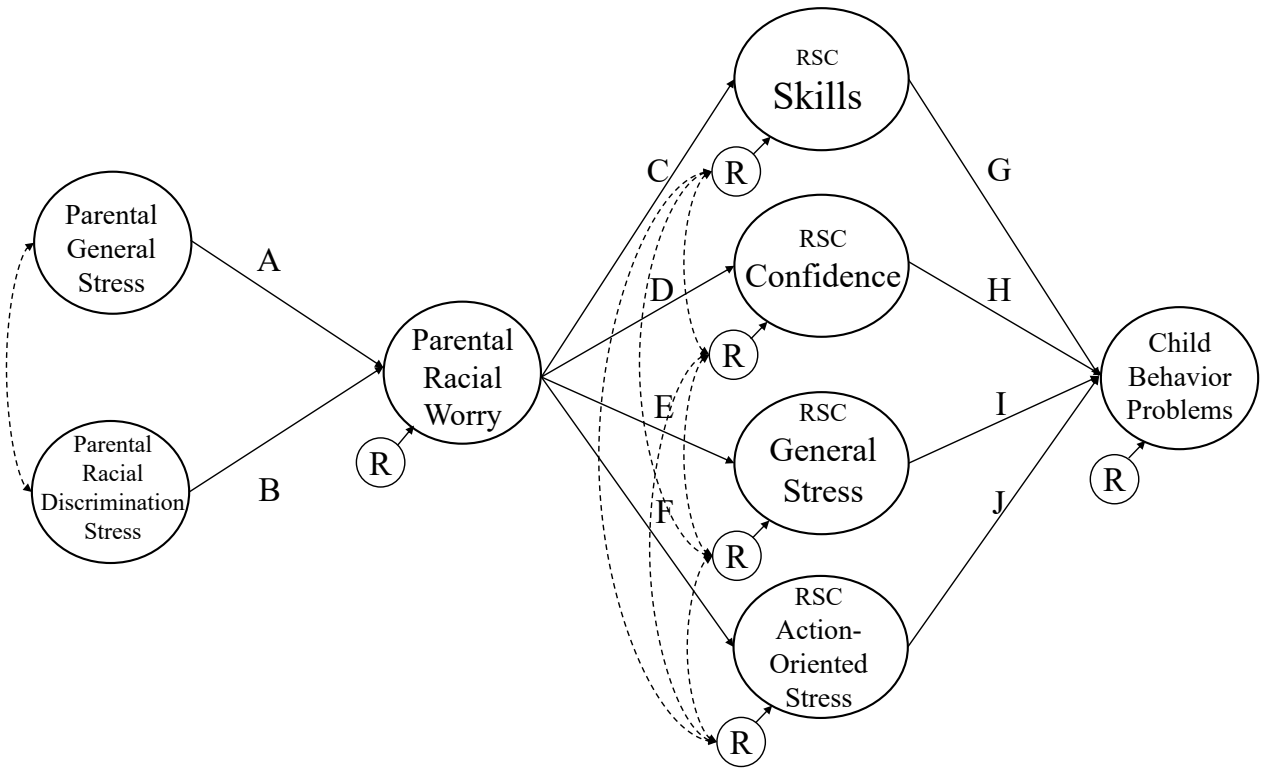


Table 24. Summary of Study Hypotheses with Specified Model Paths

Research Questions & Hypotheses	Variables	Paths
RQ1. Does the a priori theorized SEM model produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?		
H1a. The *a priori* SEM model, based on theory, will demonstrate at least adequate fit.	All	All
RQ2. Within the SEM model, are self-reported parent stressors—both general and racialized—related to self-reported parental racial worry for their children?		
H2a. Within the SEM model, parent general stress (reflecting everyday life stressors) will show a positive association with parental racial worry.	General Stress Parental Racial Worry	A
H2b. Within the SEM model, parent racial stress (reflecting previous experiences with racial discrimination) will show a positive association with parental racial worry.	Racial Discrimination Stress Parental Racial Worry	B
H2c. Within the SEM model, the association between parental racial stress and parental racial worry will be significantly stronger than the association between parental generalized stress and parental racial worry.	General Stress Racial Discrimination Stress Parental Racial Worry	A, B
RQ3. Within the SEM model, does self-reported parental racial worry significantly influence the self-reported racial socialization competency of Black parents?		

Table 24 (cont'd)

H3a. Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency confidence.	Parental Racial Worry RSC Confidence	C
H3b. Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency skills.	Parental Racial Worry RSC Skills	D
H3c. Within the SEM model, parental racial worry will be positively associated with parental racial socialization general stress	Parental Racial Worry RSC Stress (call to action)	E
H3d. Within the SEM model, parental racial worry will be positively associated with parental racial socialization competency "call to action" stress	Parental Racial Worry RSC Stress (general)	F
RQ4. Within the SEM model, are each of the four constructs of self-reported racial socialization competency significantly associated with parent-reported child behavior outcomes?		
H4a. Within the SEM model, racial socialization competency confidence will be negatively associated with child behavior problems (i.e., higher racial socialization competency confidence will be associated with fewer child behavior problems).	RSC Confidence Child Behavior Problems	G

Table 24 (cont'd)

H4b. Within the SEM model, racial socialization competency skills will be negatively associated with child behavior problems (i.e., higher racial socialization competency skills will be associated with fewer child behavior problems).	RSC Skills Child Behavior Problems	H
H4c. Within the SEM model, racial socialization competency general stress will be positively associated with child behavior problems (i.e., higher racial socialization competency stress will be associated with more child behavior problems).	RSC Stress (call to action) Child Behavior Problems	I
H4d. Within the SEM model, racial socialization competency "call to action" stress will be positively associated with child behavior problems (i.e., higher racial socialization competency stress will be associated with more child behavior problems).	RSC Stress (general) Child Behavior Problems	J

CHAPTER IV: RESULTS

This study sought to build a workable model examining several parental experiences as contributing to child behavior outcomes, specifically related to racialized experiences in Black families. The SEM comprises eight latent variables that are derived from individual rating-scales, which were all completed by the parent. The aim of this study was to test whether a statistical model based on theory and prior research would demonstrate acceptable fit; acceptable fit would qualify the model to be used to test additional research questions concerning specific relationships among the modeled latent variables. As described in the Method section, preliminary EFAs and CFAs were used to test the psychometric strengths and weaknesses of all rating scales prior to the SEM stage of this study. Further, these factor analytic efforts provided guidance for indicator selection for the latent variables. In accordance with best practice for ordinal data, the weighted least squares mean and variance adjusted (WLSMV) estimator was utilized across all SEM analyses. Further, as described in the method, multiple fit indices were used (i.e., RMSEA, CFI, TLI, Muthén & Muthén, 1998-2017).

Analytic Approach

Many data analyses were conducted in order answer the primary research question of this project. To test the theorized, directional relationships between the constructs of interest within the hypothesized SEM, the following models were examined in MPlus 8.0 (Muthén & Muthén, 1998-2017). As outlined and reported in the Method section, both EFAs and CFAs were conducted, culminating in the testing of Model A, the master measurement model, which demonstrated acceptable fit (RMSEA = 0.041 [0.038 – 0.043]; CFI = 0.949; TLI = 0.947; Chi-square (*df*) = 3367.319 [2116]). Following this step, and reported in this Results section, the hypothesized SEM model, or Model B, was assessed using MPlus to examine model fit and path coefficients.

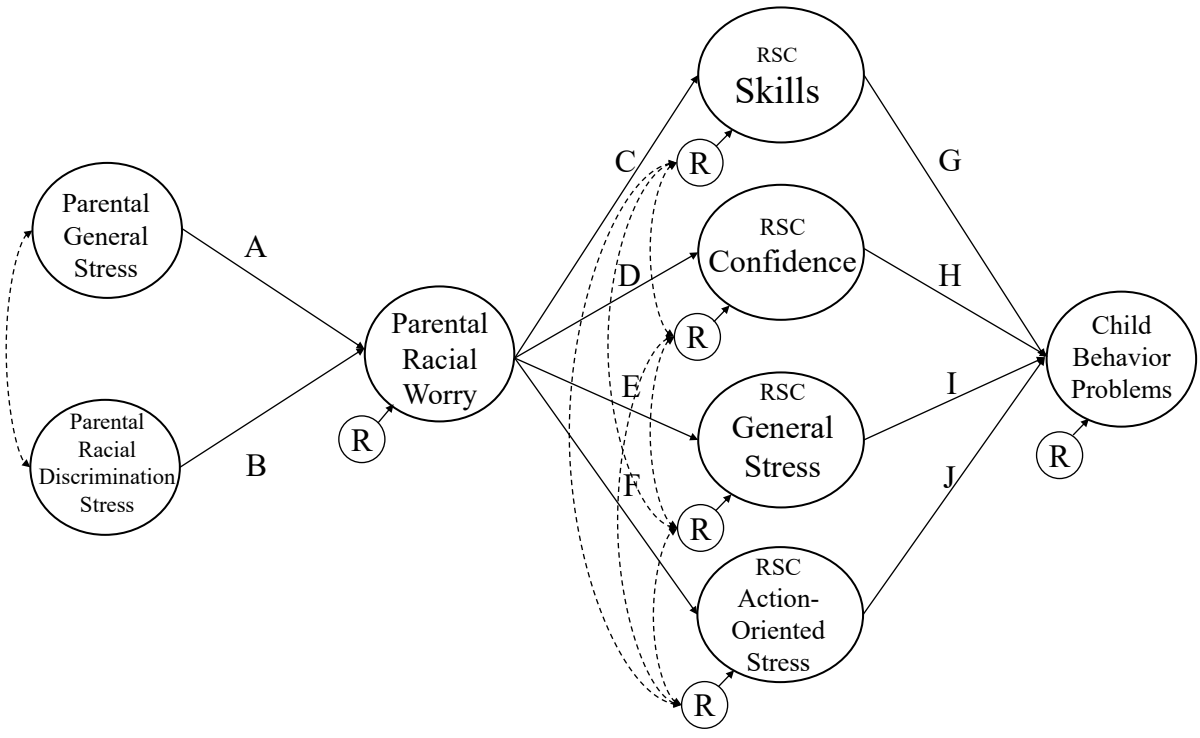
RQ1. Does the a priori theorized SEM model produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?

Model B: Hypothesized Model

Model B, depicted below in Figure 13, represents the hypothesized overall SEM for this study. This figure features covariances between the residual terms of each of the four parallel latent mediator variables. The indicators for these latent variables were all derived from the same instrument (i.e., RaSCS, Anderson et al., 2020), and, in some cases, items covering different topics share much of the same language. Thus, it was concluded that covariance paths between residuals should be estimated in the model to best capture the in vivo relationships between these constructs (e.g., to capture overlapping aspects of method, anticipated relationships between the constructs within the measure, etc.).

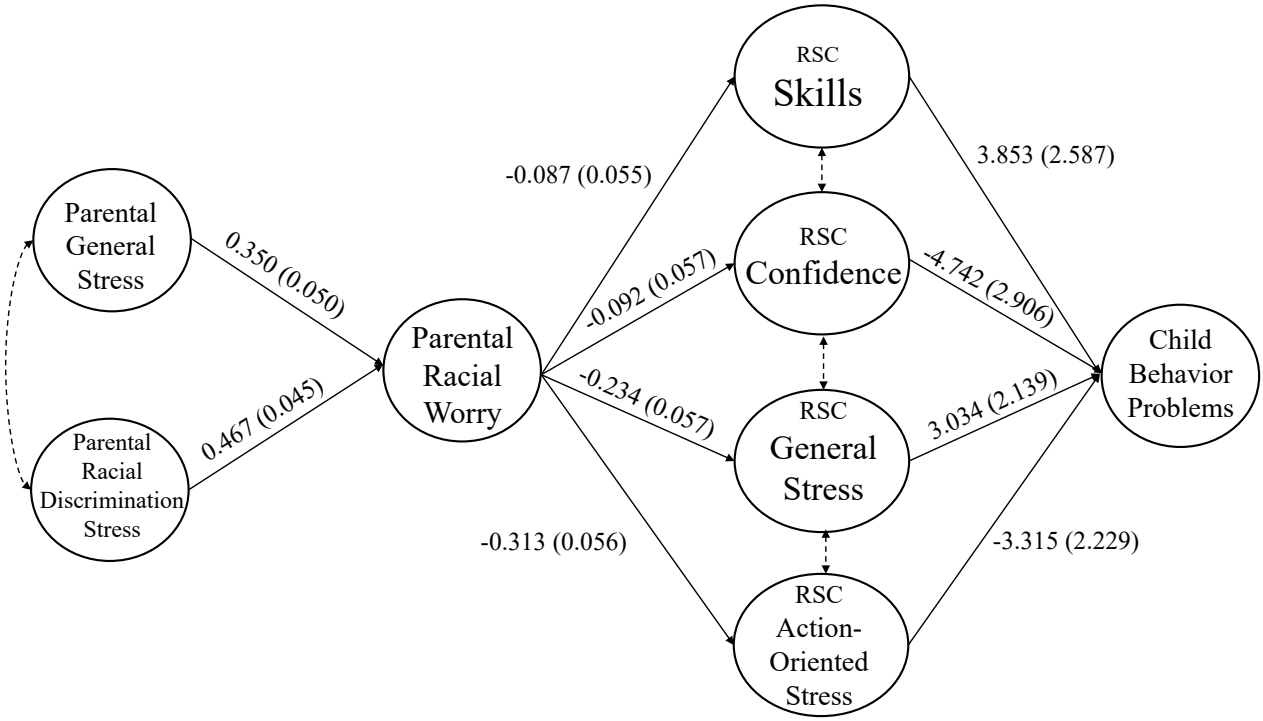
H1a. The <u>a priori</u> SEM model, based on theory, will demonstrate at least adequate fit.

Figure 15. Model B: A Priori Hypothesized Model



At this stage, path coefficients and associated standard errors and *p*-values were reviewed. Fit indices suggested adequate fit (RMSEA = 0.047 [0.045 – 0.050]; CFI = 0.932; TLI = 0.930; Chi-square = 3726.068 (df = 2062.) While path loadings between the exogenous variables and parental racial worry, as well as those between parental racial worry and the four parallel mediation terms were within expected limits, the path coefficients and standard errors from the mediation terms to the final outcome variable were excessively elevated, with large standard errors, and suggested a problem with the parallel mediators portion of the model. In short, despite apparently adequate overall model fit, the model itself was problematic. See Figure 16 for additional detail.

Figure 16. Model B Path Coefficients



Note: Full residual covariance paths are not pictures. This figure features a simplified depiction of these paths with dashed lines between parallel latent variables. See Figure 13.

At this stage, it was determined that this hypothesis was not supported. In other words, the model, as initially hypothesized, was not a workable SEM model that could be used to address research questions and hypothesized related to the modeled constructs. Exploratory analyses were conducted to identify a workable model.

Exploratory Analyses in Pursuit of an Operable SEM

Given the fit issues of the a priori hypothesized model, efforts were directed to explore defensible changes to the model that could improve fit. These exploratory analyses are described in what follows.

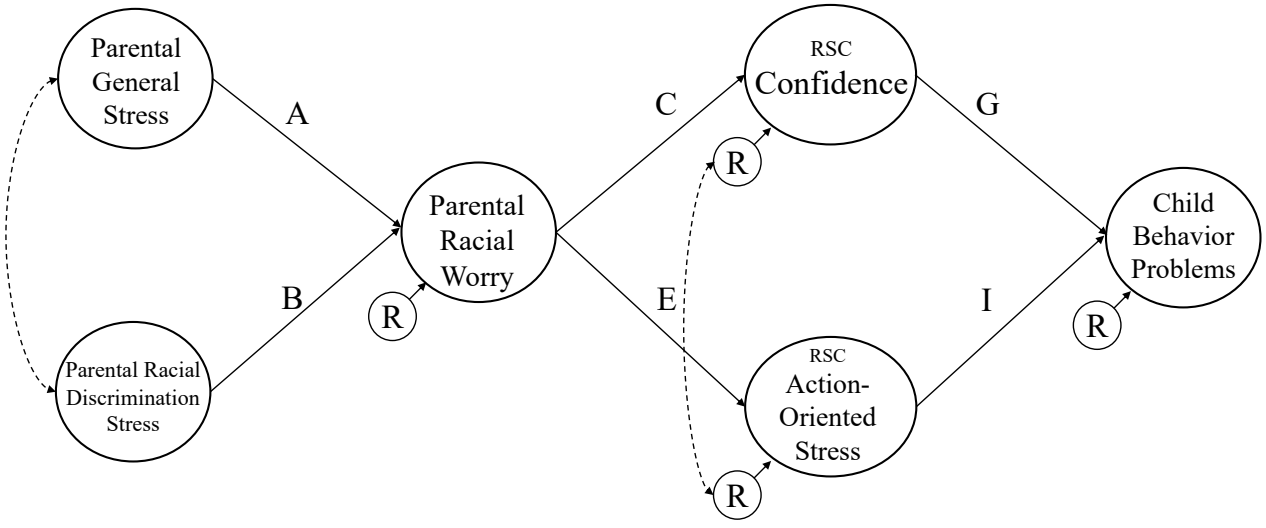
Multicollinearity. Multicollinearity among the parallel mediators was suspected of compromising the fit and estimates in this portion of the model. The RSC General Stress term was removed from the model to partially address the high shared variance between the two terms that represented RSC Stress (i.e., RSC General Stress and RSC "Call to Action" Stress). Indeed, those two latent variables were drawn from the same original single RCS Stress subscale, which was divided into two subscales due to subsequent psychometric testing revealed that stress items clearly formed two factors, general stress and "call to action" stress (Anderson et al., 2020). This change partially addressed multicollinearity, however, elevated path coefficients persisted.

Theory-based support for model trimming. Both the statistical output information from prior analyses and the foundational literature were consulted for guidance in adjusting the model. The RSC Skills latent factor and the RSC General Stress factor were trimmed from the model. These two latent variables shared so much common variance with RSC Confidence and RSC "Call to Action" Stress that they created statistical redundancy within the model, which adversely impacted the model's path coefficient estimates. Further support for this adjustment came from underlying theory. As measured on the RaSCS, confidence is a cognitive construct

(e.g., I believe I can…) while stress is a behavioral construct (e.g., I am stressed to…). By retaining latent variables that represent both cognitive and behavioral constructs, it is possible to still draw meaningful conclusions about these two facets of racial socialization competency without sacrificing the potential utility of the overall model. After these adjustments, Model C was identified as the final model. Model C demonstrated adequate fit and produced a population covariance matrix that is consistent with the observed covariance matrix.

After numerous model adjustments, error examinations, and model comparisons, a workable SEM model (Model C) that addressed statistical issues (i.e., multicollinearity, suppression effects) was identified. For example, consistent with previous research and earlier iterations of this model, the two *racial socialization competency* terms were correlated in the model (Anderson et al., 2020). The RMSEA for this workable model was within the borderline to adequate range (RMSEA = 0.063 [0.060 – 0.066]), while the CFI (0.907) and TLI (0.903) were just above the acceptable cut-off for categorical data (> 0.900; Xia & Yang, 2019).

Figure 17. Model C: Reduced SEM Model



See Table 16 for a breakdown of model fit indices for all models.

Table 25. Fit Indices for Model A, Model B, and Model C

Model	RMSEA (90% CI)	CFI	TLI	x^2 (*df*)
Model A: Master Measurement Model	0.037 (0.034 – 0.049)**	0.960**	0.958**	3045.234 (2051)
Model B: A Priori Hypothesized Model	0.047 (0.045 – 0.050)**	0.932*	0.930*	3726.068 (2062)
Model C: Final Revised SEM Model	0.063 (.060 – 0.065)*	0.907*	0.903*	3426.110 (1422)

Notes: RMSEA Guideline for Ordinal Data: < 0.06 for good fit; <0.08 for acceptable fit

CFI Guideline for Ordinal Data: > 0.950 for good fit; > 0.900 for acceptable fit

TLI Guideline for Ordinal Data: > 0.950 for good fit; > 0.900 for acceptable fit

**Indicates acceptable fit*

***Indicates good fit*

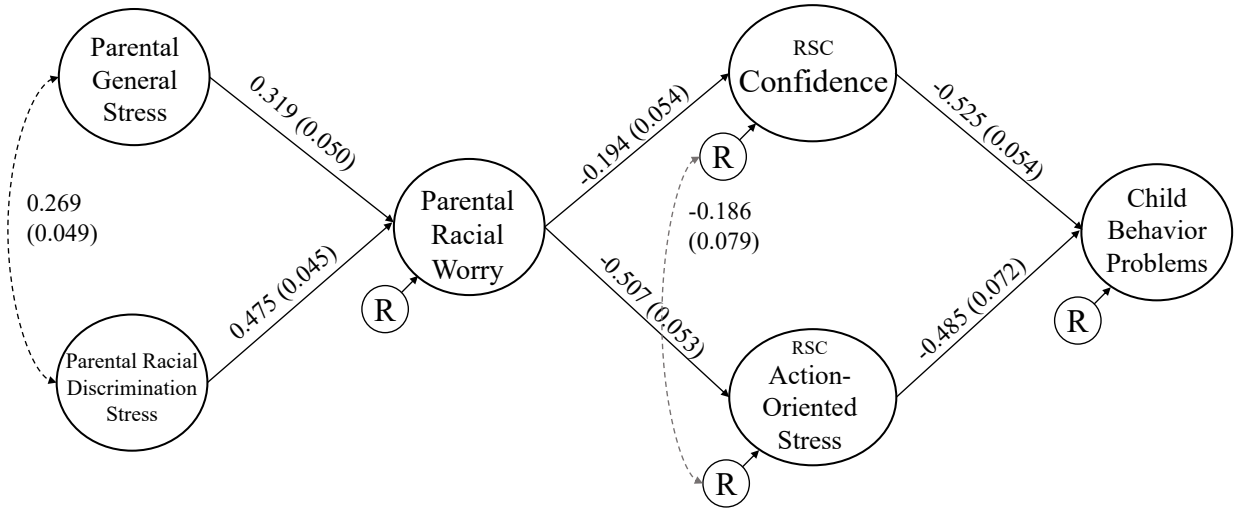
Model C: Final Model

The systematic removal of two latent variables appeared to successfully address issues of multicollinearity and suppression effects. Following these adjustments, measurement model data suggested that each measurement model within the overall SEM were composed of the best unidimensional subset of items to act as indicators. Further, a review of structural model paths revealed path coefficients within expected limits (< 1.000), as well as improved fit indices. Due to Model C's standing as the strongest statistical representation of these constructs in SEM, it was determined to be an operable tool for the remaining research questions and hypotheses. For the purposes of pursuing the research questions outlined in this dissertation, model fit was determined to be acceptable.

Operating the Full Structural Equations Model

With a final model (Model C) identified, individual path loadings, covariance matrices, and standard error information were used to examine relationships among latent variables within the model. Research Questions 2, 3, and 4 are directly concerned with these types of examinations. Results for analyses addressing these research questions are outlined below. The final SEM model, which was used in these analyses, is reproduced in Figure 18.

Figure 18. Model C Path Coefficients



RQ2. Within the SEM model, are self-reported parent stressors—both general and racialized—related to self-reported parental racial worry for their children?

H2a. Within the SEM model, parent general stress (reflecting everyday life stressors) will show a positive association with parental racial worry.

The path estimate in question (Path A) is $\beta = 0.319$ (S.E. = 0.050; $p < 0.001$). This is a positive value with a moderate effect size, representing a meaningful statistical and conceptual connection between parental general stress and parental racial worry. This result indicated that as parental general stress increases, so does parental racial worry (moderate effect size). Thus, hypothesis 2a was supported.

H2b. Within the SEM model, parent racial stress (reflecting previous experiences with racial discrimination) will show a positive association with parental racial worry.

This path estimate in question (Path B) is $\beta = 0.475$ (S.E. 0.045; $p < 0.001$). This is a positive value with a moderate (almost large) effect size, representing a meaningful statistical and conceptual connection between parental discrimination stress and parental racial worry. This result suggests that as distress from discrimination increases for parents, so do the racialized worries they hold for their children. Hence, hypothesis 2b was also supported.

H2c. Within the SEM model, the association between parental racial stress and parental racial worry will be significantly stronger than the association between parental generalized stress and parental racial worry.

Importantly, hypotheses H2a and H2b found that positive associations exist between the two predictor variables and the latent variable for parental racial worry, setting up Hypothesis 2c to then address the comparison between these two path values. Path A ($\beta = 0.319$) represents the direct effect of parental general stress on parental racial worry; Path B ($\beta = 0.475$) represents the direct effect of parental racial discrimination stress and parental racial worry. Path B, representing a connection with parental racial stress, clearly demonstrates a stronger positive relation with parental racial worry than does Path A, representing the connection to general stress.

The Wald Test of parameter constraints was used to test Hypothesis 2c (i.e., test the difference between Path A and Path B for statistical significance in the predicted direction). The Wald Test, also known as the Wald Chi-Squared Test, examines statistical significance of constrained parameters for exogenous variables (Agresti, 2010). Within MPlus, the Wald Test is structured as a two-tailed hypothesis test. However, Hypothesis 2c is one-tailed. Because of this,

the resulting *p*-value will be divided in half to answer this one-tailed, directional hypothesis. The null hypothesis of this test is that A = B, or that no meaningful difference exists between the path coefficients A and B. The Wald Test results yielded a two-tailed *p*-value of 0.0675. Thus, the one-tailed *p*-value for this hypothesis ($p = 0.033$) was significant at an alpha level of .05. Given statistical significance and Path A > Path B, hypothesis 2c was supported.

RQ3. Within the SEM model, does self-reported parental racial worry significantly influence the self-reported racial socialization competency of Black parents?

Of note, several of the originally specified research questions cannot be answered. Because the RSC Skills and RSC General Stress latent variables were removed from the model, hypotheses that involve those variables were not pursued. Hypotheses directly impacted by the removal of those variables include H3b, H3d, H4b, and H4d. The full text of those hypotheses can be reviewed in Table 15 in Chapter III: the Method.

Prior to examining these hypotheses, an important caveat about the relationship between RSC Confidence and RSC "Call to Action" Stress must be mentioned. There exists a covariance pathway between these two latent variables. This pathway allows the statistical software to correlate the residual terms of these latent variables, which is intended to model shared variance between these two that is separate from the direct effect of Parental Racial Worry and reflects collinearity between these constructs as operationalized here. RSC Confidence and RSC "Call to Action" Stress are two constructs that: (a) are highly related constructs, in that they are both subcomponents of racial socialization competency; and (b) the indicators that inform the latent factors were sourced from the same instrument. Thus, having this covariance between latent mediator residuals in the model is important from both a theoretical and measurement perspective.

H3a. Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency confidence.

The beta weight for the specified path (Path C) was negative, statistically significant, and slightly below the standard for a moderate effect size (β = -0.194 [S.E. = 0.054]; $p < 0.001$). This result implies an inverse relationship between the two latent factors, albeit with a small observed effect size. The negative path loading suggests that as parental racial worry increases, RSC Confidence decreases. Thus, Hypothesis 3a was supported.

H3c. Within the SEM model, parental racial worry will be positively associated with parental racial socialization competency "call to action" stress.

The beta weight for the specified path (Path E) was *negative,* statistically significant, and consistent with a strong effect size (β = -0.507 [S.E. = 0.053]; $p < 0.001$). This result suggested that as parental racial worry increases, racial socialization action oriented stress decreases. Further, the strong effect size points to a powerful predictive relationship between these two latent variables. This finding was unexpected and did not fulfil the prediction of Hypothesis 3c. Thus, hypothesis 3c was not supported. Interpretation and additional information will be addressed in greater detail in Chapter V: Discussion.

RQ4. Within the SEM model, are each of the four constructs of self-reported racial socialization competency significantly associated with parent-reported child behavior outcomes?

H4a. Within the SEM model, racial socialization competency <u>confidence</u> will be negatively associated with child behavior problems (i.e., higher racial socialization competency confidence will be associated with fewer child behavior problems).

The path coefficient for this path (Path G) is β = -0.525 (S.E. = 0.054; $p < 0.001$), representing an inverse relationship between RSC Confidence and child behavior problems was both statistically significant and consistent with a strong effect size. In other words, as RSC Confidence increases, child behavior problems decrease. Thus, Hypothesis 4a was supported.

H4c. Within the SEM model, racial socialization competency "call to action" <u>stress</u> will be positively associated with child behavior problems (i.e., higher racial socialization competency stress will be associated with more child behavior problems).

Another unexpected finding was revealed by analysis in pursuit of Hypothesis 4c. Though it was expected that RSC "Call to Action" Stress would have a statistically significant and strong relationship with child behavior problems, a strong inverse relationship was found (β = -0.485 [S. E. = 0.072]; $p < 0.001$) where a positive association was predicted. This result suggests that as RSC "Call to Action" increases, child behavior problems decreases. Thus, Hypothesis 4c was not supported. This unexpected finding and will be addressed in greater detail in Chapter V: Discussion.

Table 26. Summary of Research Questions and Hypotheses Results

Research Questions & Hypotheses	Variables	Results
RQ1. Does the a priori theorized SEM model produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?		
H1a. The *a priori* SEM model, based on theory, will demonstrate at least adequate fit.	All	Not Supported
RQ2. Within the SEM model, are self-reported parent stressors—both general and racialized—related to self-reported parental racial worry for their children?		

Table 26 (cont'd)

H2a. Within the SEM model, parent general stress (reflecting everyday life stressors) will show a positive association with parental racial worry.	General Stress Parental Racial Worry	Supported
H2b. Within the SEM model, parent racial stress (reflecting previous experiences with racial discrimination) will show a positive association with parental racial worry.	Racial Discrimination Stress Parental Racial Worry	Supported
H2c. Within the SEM model, the association between parental racial stress and parental racial worry will be significantly stronger than the association between parental generalized stress and parental racial worry.	General Stress Racial Discrimination Stress Parental Racial Worry	Supported
RQ3. Within the SEM model, does self-reported parental racial worry significantly influence the self-reported racial socialization competency of Black parents?		
H3a. Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency confidence.	Parental Racial Worry RSC Confidence	Supported
H3b. Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency skills.	Parental Racial Worry RSC Skills	N/A

Table 26 (cont'd)

H3d. Within the SEM model, parental racial worry will be positively associated with parental racial socialization competency stress (general).	Parental Racial Worry RSC Stress (call to action)	Not Supported
RQ4. Within the SEM model, are each of the four constructs of self-reported racial socialization competency significantly associated with parent-reported child behavior outcomes?		
H4a. Within the SEM model, racial socialization competency confidence will be negatively associated with child behavior problems (i.e., higher racial socialization competency confidence will be associated with fewer child behavior problems).	RSC Confidence Child Behavior Problems	Supported
H4b. Within the SEM model, racial socialization competency skills will be negatively associated with child behavior problems (i.e., higher racial socialization competency skills will be associated with fewer child behavior problems).	RSC Skills Child Behavior Problems	N/A
H4c. Within the SEM model, racial socialization competency stress general will be positively associated with child behavior problems (i.e., higher racial socialization competency stress will be associated with more child behavior problems).	RSC Stress (call to action) Child Behavior Problems	Not Supported

Table 26 (cont'd)

H4d. Within the SEM model, racial socialization competency "call to action" stress will be positively associated with child behavior problems (i.e., higher racial socialization competency stress will be associated with more child behavior problems).	RSC Stress (general) Child Behavior Problems	N/A

CHAPTER V: DISCUSSION

> "Given what psychology deals with, we must ask ourselves whether, with the tools at our disposal today, we can say, or more important, do something that will make a significant contribution to solving the crucial problems of our communities. In our case more than anyone else's, the principle holds that the concern of the social scientist should not be so much to explain the world as to transform it." (Ignacio Martín-Baró, 1994, p. 19)

As stated in the opening of this manuscript, racism is a public health crisis that merits a top-down, re-conceptualization of how we support behavioral health and wellness for Black individuals, families, children, and communities. A long-standing societal ill held up by white supremacy, racism is a multi-factorial oppressive force that applies incredible pressure to the lives of those affected. The results of this pressure can be found through examination of measurable, differential health, academic, and economic outcomes for populations of color (Bailey et al., 2017; Carter, 2007; Trent et al., 2019; United Nations Human Rights Council Office of the High Commissioner, 2021). While many fields of study and practice are investigating ways to mitigate these harms, this dissertation covers one corner of health and community psychology: the stress and appraisal processes surrounding race-based stressors, family dynamics, and healing.

The racial encounter coping appraisal and socialization theory (RECAST; Anderson & Stevenson, 2019a) provides a theoretical framework for understanding how its many components (e.g., racist encounters, RS, coping) operate together in Black families (see Figure 1). This structural equation modeling study focused on overall parent stress, distress following racist encounters, parental racial worry, racial socialization competency, and child behavior outcomes.

The core interaction components represented in this dissertation were inspired by the moderation component within the RECAST Model (Anderson & Stevenson, 2019). This moderation component depicts Racial Socialization Competency, Parental RS Stress, and Child RS Stress as bidirectionally related to each other, but no additional information about these theorized bidirectional relationships was available. The theorized model in this study was proposed to both elucidate relations between the components and, in a departure from some recent research (e.g., Anderson et al., 2021b), the theorized model in this dissertation reframed RSC constructs as malleable *mediators* between Parental Racial Worry and Child Behavior Problems. *Malleability is consistent* with the growing body of literature supporting RSC as a target of psychological assessment and intervention (e.g., Anderson et al., 2018b, 2018c), while *mediation* is consistent with a conception of Parental Racial Worry motivating the use of parental coping resources, conceptualized as RSC Confidence and RSC Action-Oriented Stress within the model, to deal effectively with child behavior. This model was devised, developed, and tested to examine which components of RSC might be most beneficial to adjust or change through intervention for Black parents, to improve Black family and child outcomes.

This study was guided from conception to conclusion by Critical Race Theory and QuantCrit (Crawford et al., 2019; Gillborn et al., 2018). From Critical Race Theory, this study borrowed intentionality around anti-essentialism, an acknowledgement that racism is endemic in society, and an inclusion of positionality and reflexivity exercises from its author (Bell, 1992; Crenshaw, 1990; Ladson-Billings & Tate, 1995). The author utilized both CRT and QuantCrit to maintain grounding in the real world setting of white supremacy and anti-Blackness (Gillborn et al., 2018; Ladson-Billings & Tate, 1995). Consistent with its CRT roots, QuantCrit urges researchers to acknowledge that their data is not value-free, and that it cannot speak for itself

(Crawford et al., 2019). Rather, quantitative data is organized, analyzed, interpreted, and presented through invented categories by complex and flawed investigators (Gillborn et al., 2018). This grounding was considered throughout the research design and reporting process. With these guiding principles, data analysis and interpretation proceeded.

This study aimed to explore the influence of several parent factors on one another and on child outcomes through the development and operation of a structural equation model (SEM; Bollen, 1989). This study was structured around four research questions and their associated hypotheses. Below, the results are restated with additional context and interpretation.

Research Questions & Hypotheses

The research questions and hypotheses outlined in this dissertation addressed several constructs related to parental experiences, racial socialization competency, and child behavior outcomes. Based in theorized relationships found in RECAST (Anderson & Stevenson, 2019a) and Family Stress Theory (Conger & Conger, 2002), these research questions addressed parental general stress and parental racial discrimination stress, the connection of both of these constructs to parental racial worry, as well as downstream connections to racial socialization competency and child behavior problems as a final outcome variable. Four hypotheses went unaddressed due to weaknesses in the hypothesized SEM: hypothesis 3b[1], hypothesis 3d[2], hypothesis 4b[3], and

[1] Within the SEM model, parental racial worry will be negatively associated with parental racial socialization competency *skills.* This will be reflected in a negative, statistically significant path coefficient representing the impact of parental racial worry on racial socialization competency skills

[2] Within the SEM model, parental racial worry will be positive associated with parental racial socialization competency stress (general). This will be reflected in a positive, statistically significant path coefficient representing the impact of parental racial worry on racial socialization competency stress (general).

[3] Within the SEM model, racial socialization competency skills will be negatively associated with child behavior problems (i.e., higher racial socialization competency skills will be associated with fewer child behavior problems). This will be reflected in a negative, statistically significant path coefficient representing the impact of RS competency - skills on child behavior problems.

hypothesis 4d[4]. All four of these addressed the two latent variables dropped from the model during the exploratory phase (i.e., RSC General stress, RSC Skills) detailed in the Chapter IV: Results. All other research questions and hypotheses are reviewed below with accompanying interpretation.

Research Question 1

Does the a priori theorized model supported produce an estimated population covariance matrix that is consistent with the sample (observed) covariance matrix?

As with many SEM studies, the first research question and hypothesis of this study addressed the overall fit of the hypothesized model. This model began with covarying exogenous variables *parental racial discrimination stress and parental general stress*, which together led to *parental racial worry*. Notably, the parental general stress term was modeled in part to detect if the racialized component of racial discrimination stress was at all different from generalized stress as a contributing factor to parental racial worry. Parental racial worry was originally modeled as leading to four parallel mediation terms: (a) RSC Confidence, (b) RSC Skills, (c) RSC General Stress, and (d) RSC "Call to Action" Stress; the model terminated with the final outcome variable representing child behavior problems.

The model as hypothesized demonstrated good fit at the measurement model stage (RMSEA = 0.037 [0.034 – 0.049]; CFI = 0.960; TLI = 0.958; x^2[2051] = 3045.23; Hu & Bentler, 1999) and acceptable fit at the full SEM stage (RMSEA = 0.047 [0.045 – 0.050]; CFI = 0.932; TLI = 0.930; x^2[2062] = 3726.068; Hu & Bentler, 1999). While the model as hypothesized demonstrated strong model fit, significant multicollinearity (e.g., β = -4.742 [2.907]) between the

[4] Within the SEM model, RSC stress general will be positively associated with child behavior problems (i.e., higher RSC stress will be associated with more child behavior problems). This will be reflected in a positive, statistically significant path coefficient representing the impact of RSC stress general on child behavior problems.

parallel mediation terms and related suppression effects (e.g., β = 3.034 [2.139] vs. β = -3.315 [2.229]) limited the utility of the model for addressing research questions and hypotheses. Most importantly, moving forward with operating an SEM significant multicollinearity has demonstrated an elevated risk of Type II errors (Grewal et al., 2004). Thus, additional rounds of factor analyses were conducted on instruments that demonstrated psychometric weaknesses (i.e., PSS-10, WARP, RaLES-B). Following these instrument modifications and examination of measurement models, the model converged with acceptable fit (RMSEA = 0.063 (0.060 – 0.065); CFI = 0.907; TLI = 0.903; $x^2(1422) = 3426.110$; Hu & Bentler, 1999). Further, this model included *p*-values all below 0.001, and no observable suppression effects. This final model contained only two parallel mediation terms (i.e., RSC Confidence, RSC "Call to Action" stress). Focusing on these two parallel terms allowed the model to elucidate differences between a positive subcomponent of RSC (RSC Confidence) and a more negative subcomponent: RSC "Call to Action" Stress. Due to the convergence of a model with acceptable fit, the remaining data was examined in the context of the proposed hypotheses that still applied to this trimmed model.

Research Question 2

Within the SEM model, are self-reported parent stressors—both general and racialized—related to self-reported parental racial worry for their children?

QuantCrit reminds us to reject the interpretation of data without context. Using this framework allows researchers significant benefit of situating their studies in ecological contexts and within white supremacist systems rife with anti-Blackness. It was this freedom to examine these constructs within broader social ecologies that fostered this research question. Critical Race Theory tells us that racism is endemic to society, and previous literature guided by counter-

storytelling contributed to our current understandings of racism as a global health crisis akin to a pandemic (Anderson et al., 2022; Carter, 2007; Trent et al., 2019). This context suggests an urgency to understand how experiences of racial discrimination as a stressor operates in Black families and communities (Smith-Bynum, 2022), and in turn, inspired this research question.

Hypothesis 2a sought to examine whether, within the SEM model, parent general stress (reflecting everyday life stressors) would show a positive association with parental racial worry. Hypotheses 2a was supported by the model, with this specific path showing a positive, moderate path coefficient *(β* = 0.319 [0.050]). As stated in the Results chapter, this finding suggests that as parental general stress increases, parental racial worry also increases. Hypothesis 2b sought to examine whether, within the SEM model, parent racial stress (reflecting previous experiences with racial discrimination) would show a positive association with parental racial worry. The final model suggested that, yes, there is a positive, moderately strong predictive relationship between these two constructs *(β*=0.475 [0.045]). Conceptually, this suggests that, as racial discrimination stress increases, parental racial worry also increases. These findings are consistent with previous research which states that stress and worry are highly related experiences (Capobiano et al., 2018; Hur et al., 2017). Further, parental stress has been shown to affect psychological constructs within the parent-child dyad, such as parental worry. Thus, a finding that shows specific social stressors can color the family dynamics with the tone of that stressor, is consistent with prior research (Barnett, 2008; Nievar et al., 2014; Simons et al., 2016; White & Roosa, 2012). These findings are also consistent with literature showing that racialized constructs themselves are unique stressors that warrant equally unique models to predict outcomes (Anderson & Stevenson, 2019a).

Hypothesis 2c posited that racial discrimination stress would be a stronger contributor to parental racial worry than would parental general stress. The Wald Test of parameter constraints was used to examine whether the parental racial discrimination stress path to parental racial worry (beta = 0.475 [0.045]) was larger than the general stress path (beta = 0.319 [0.050]) at a statistically significant level (p-value < 0.05). This significant test result suggests that, while both generalized and racialized stressors serve as adequate predictors of parental worries about racial discrimination for their children, racialized stressors are a stronger predictor. This is a critical finding, because critics of the psychological study of racism and its lived effects often ask what *other* psychological factors—aside from racialized ones—could be a better explanation for the result. The most anticipated secondary factor for this study was that general stress and racial discriminations stress could not be meaningfully teased apart. Thus, this additional analysis and significant result provides the additional rigor necessary to publish racism-related psychological research, though these standards are sometimes more heavily applied to psychological investigations of oppression than to other subjects.

Prior research tells us that most Black parents engage in RS at baseline (Hughes et al., 2006). Prior research also demonstrates that RS competency is its own separate construct that plays a moderating role between discriminatory racial encounters and self-efficacy and coping (Anderson & Stevenson, 2019a). Further, there exist interventions that have demonstrated a measurable positive influence on parental racial socialization competency (Anderson et al., 2018c; Stein et al., 2021). Thus, RS interventions, which can also include stress management coaching and treatment, are an ideal site to provide support for both general and racism-based stress for parents. Further, like any other evidence-based psychosocial intervention, RS competency interventions must include assessment prior to and after intervention delivery. A

measure of racial discrimination stress (e.g., RaLES-B individual racism subscale [Harrell, 1997]; UConn Racial/Ethnic Stress & Trauma Survey [UnRESTS; Waelde et al., 2010]) could be administered alongside a generalized stress measure (e.g., PSS-10). Administering a set of scales representing several relevant parent factors is conductive to meeting individual parents' needs, rather than treating Black parents as a monolithic group to receive identical intervention. In terms of intervention itself, parents should receive both preventative and proactive support specifically for their racialized stressors. Research tells us that racial stress warrants its own, customized intervention separate from other, non-racialized forms of stress (Carter, 2007; Jernigan & Henderson Daniel, 2011; Pieterse & Carter, 2007; Pieterse et al., 2013). Because we know that *both* general and racial discrimination stress contribute to parental racial worry (Anderson et al., 2021b), the primary components of racial stress interventions should be provided to parents alongside more generalized interventions for stress, such as mindfulness, CBT, or more involved psychotherapy in the case of stressors that co-occur with diagnosed behavioral health problems (Anderson et al., 2018b; Metzger et al., 2021). Importantly, validating for parents that these experiences impact more than just their own internal worlds, but do in fact contribute challenges to other aspects of life can be an important place to build rapport and trust.

The research identifying and investigating racial stress and trauma has grown tremendously in the last decade. This study contributes to this growing and important body of work which lends "legitimacy" in the eyes of scholars and psychologists who diminish the importance of recognizing these psychological experiences as unique and therefore needing unique intervention. This dissertation adds more fuel to the fire of developing resources to address racial discriminations stress and trauma, to be provided at settings *beyond* RS

interventions. The public health conceptualization of racism and racial stress encourages us to treat racism as endemic (e.g., Anderson et al., 2021a; Bell, 1992). To meaningfully treat racism as endemic is to create widely available literature in multiple languages, screenings at primary care offices, support groups and other programming available in multiple community settings, and to support families through school-community partnership. In other words, this swell of research is calling for a paradigm-shift in how we address racism-related factors for Black families.

Resources to address racial discrimination stress and trauma must be provided to parents outside the context of RS interventions (e.g., parent management training), to serve both the wellbeing of parents and their children who are directly affected by these processes (Anderson et al., 2021a; Coard et al., 2004). Black people tend to access psychotherapy at a lower rate than other groups, such as factors such as long waitlists, insurance gaps, mistrust of therapists, and lack of therapists that mirror the Black experience. Thus, supports for racial stress should be provided outside of clinics that specialize in RS interventions. Warm handoffs at primary care offices and pediatric clinics, programming offered in child-focused settings (Jones & Neblett, 2016), non-profits and community organizations, and religious settings (Lee et al., 2015) could all contribute to assessment and intervention for racial stress as a contributor to Black family dynamics and child outcomes (Anderson et al., 2018a; Jones & Neblett, 2017). In other words, these psychosocial stressors uniquely prevalent in Black families require systemic assessment and intervention and multiple levels of support (Anderson et al., 2021a).

Research Question 3

Within the SEM model, does self-reported parental racial worry significantly influence the self-reported racial socialization competency of Black parents?

The RECAST Model proposes that racial socialization competency is related to racial stress by moderating a relation between stress and racial coping self-efficacy (Anderson & Stevenson, 2019a). While this study did not address racial coping self-efficacy, it did lean on the assumption that racial stress and RSC are likely correlated. Not only does this research question lean on RECAST for understanding, but also a wealth of previous research that suggests experiences with racism and its subsequent psychological stressors can shape behavior (Carter, 2007). Family stress models and stress and appraisal coping models also support this research question (Lazarus & Folkman, 1984; Conger et al., 2010; Conger & Conger, 2002). Finally, the assumption of *racism as endemic* (See CRT, QuantCrit) would suggest that these experiences are common enough for Black parents that the modeling of these constructs is possible in the first place.

Hypothesis 3a sought to examine whether, within the SEM model, parental racial worry would be negatively associated with parental RSC Confidence. The results showed a negative, small-to-moderate effect size for this path, supporting this hypothesis (β = -0.194 [0.054]; $p <$ 0.001). This path coefficient represents the unique variance contributed by parental racial worry to RSC Confidence and suggests that there is a slight inverse relationship. In other words, as parental racial worry increases, self-reported RSC Confidence decreases (small to moderate effect size). As a reminder, items that informed this latent variable were phrased as "I believe I can…" From this result, we can derive that parental racial worry has a slight negative influence on parents' belief in their ability to carry out RS practices at home.

Hypothesis 3c focused instead on the path from parental racial worry to parental RSC Stress, specifically "Call to Action" Stress. It sought to examine whether, within the SEM model, parental racial worry would be positively associated with parental RSC "Call to Action" Stress.

A similar argument that supported the strong association between *parental racial discrimination stress* and parental racial worry was used in the formulation of Hypothesis 3c. In hindsight, that argument failed to account for the overall context of this stressor, which is in the context of racial socialization competency. Rather than an experiential, emotional construct like parental racial discrimination stress, racial socialization competency stress is a behavioral construct. Worded as "I am/would be stressed to…," items that informed this latent variable focus on a parent *predicting* their own stress about engaging in racial socialization with their children. While parental racial discrimination stress refers to events that have already occurred, RSC Stress focuses on the future.

Hypothesis 3c was not supported by these data; in fact, a strong correlation was found in the opposite direction (β = -0.507 [0.053]; $p < 0.001$). This result suggests that as parents reported worries about racial discrimination for their children increases, their RSC "Call to Action" Stress decreases *significantly*. While this result was an unexpected finding in the context of the hypothesis, a second consultation of the literature reveals that this result is not entirely surprising. The worries reported by these parents focused on discrimination their children might face at school and in the community. "Call to Action" Stress is the hesitancy and stress parents feel about preparing their children to speak up in the face of injustice. It is a logical conclusion that, Black parents who are particularly concerned that their children are facing discrimination might feel a particular urgency to make sure their children are prepared to advocate for themselves in similar situations. This interpretation bears out strongly in the data and is supported by prior research that demonstrates that parental racial worry may inspire Black parents to practice racial socialization with their children (Anderson et al., 2021; Anderson et al., 2022; Stevenson, 2014). Thus, the result that an increase in parental racial worry begets a

decrease in RSC "Call to Action" Stress is indeed supported by the literature. An important implication of this result is that, while general, ruminative worry is often conceptualized as maladaptive, Parental Racial Worry might in fact be adaptive, in that it spurs parents on to develop competency in RS (Anderson et al., 2021; Anderson et al., 2022; Stevenson, 2014).

Lastly, that the directionality of signs for these two paths match (both negative) rather than display an inverse relationship suggests that RSC subtypes have much in common, though one may be inclined to read "confidence" and "stress" as opposing constructs. Importantly, while the paths to and from the RSC latent variables all have negative values, one inverse relationship related to these two latent variables was found. The modeled, shared covariance between the residuals of these two latent factors was β = -0.186 (0.079), a statistically significant, inverse, though small, relationship ($p < 0.001$). This covariance path coefficient revealed an inverse relationship between the latent constructs themselves. Overall, this model showed that these two latent variables are both representing some portion of RSC and that they perform differently enough to be treated as separate, though linked, constructs.

Research Question 4

Within the SEM model, are each of the four constructs of self-reported racial socialization competency significantly associated with parent-reported child behavior outcomes?

Firstly, two constructs (represented by latent variables) were removed from the final SEM during exploratory analyses in pursuit of RQ1, meaning only two constructs were addressed with this research. Hypothesis 4a sought to examine whether, within the SEM model, RSC Confidence would be negatively associated with child behavior problems (i.e., higher RSC Confidence will be associated with fewer child behavior problems). Results showed that there is indeed a negative relationship between these two factors (β = -0.525 [S.E. = 0.054], p- < 0.001).

This result represents the strongest effect size in the entire model, and compelling evidence for the statement: "As RSC Confidence increases, parent-reported child behavior problems decrease." This result lends support to the notion of providing parents with meaningful supports to improve their RSC *Confidence*, or the degree to which they believe in themselves to prepare their children adequately for the realities of racism. As a parent gets nearer and nearer to complete confidence, they report fewer and fewer child behavior problems. A natural conclusion to draw is that achieving racial socialization competency, and more specifically, *feeling* confident about RS practices as a parent has the potential to affect overall family functioning through parent-child dynamics.

Hypothesis 4c sought to examine whether, within the SEM model, RSC "Call to Action" Stress was positively associated with child behavior problems. In other words, would higher RSC stress be associated with more child behavior problems? Results showed that this is not the case. Instead, results demonstrated that, despite RSC "Call to Action" Stress being a *stress*-oriented subcomponent of RSC, it still demonstrates some protective power between racialized parental worry for children and child behavior problems. In other words, as self-reported RSC "Call to Action" Stress increases, child behavior problems decrease (β = -0.485 [0.072]; $p <$ 0.05). The justification provided above to explain the unexpected result of Hypothesis 3c also applies here. Despite RSC "Call to Action" Stress represented a stress-related construct, it is still a subcomponent of RSC, a protective factor in Black families. Thus, RSC Stress is potentially a target for support but is not necessarily something to aim to eradicate through intervention. It very well may be an important part of the overall experience of developing and maintaining racial socialization competency.

What the pattern of results for research question 4 suggests, is that when mediating for parental racial worry, these two components of racial socialization competency play strikingly similar roles as mediating factors. The mediating power of RSC Confidence is higher, which is consistent with the hypotheses outlined in this dissertation. In general, while two of this study's final eight hypotheses did not bear out in the data, important insight into the statistical behavior of two of the four subtypes of racial RSC (i.e., confidence and call to action stress) was gained.

Implications

The questions that drove this research study were grounded in RSC as a malleable construct that can be targeted through intervention in order to strengthen Black families and decrease child behavior problems. Thus, the implications for practice will focus on how providers and programs can provide assessment and intervention services. Implications for research will focus on the ways in which this dissertation aimed to innovate through integrating critical race theory and statistical modeling methodology.

Implications for Practice

Consistent with prior research, parental racial discrimination stress is predictive of parental racial worry. It is well known that racial discrimination is a near-ubiquitous experience in the Black community; CRT extends this knowledge into a societal descriptor in, *racism is endemic to society*. Thus, at described above, racial discrimination stress supports must be made widely available than they are now. If experiencing racism-based harm is a condition of living in this society, then society (e.g., public works, primary care, community agencies) must provide support for these experiences. Psychological practice, for example, falls far short of these ideals. Findings related to research question 2 suggests that, to mitigate the racism-based stress to racial worry effects, Black individuals may benefit for psychotherapeutic or other healing modalities

designed for this specific pathway. Racism-based stress and worry interventions should be implemented in primary care integrated behavioral health frameworks, social work supports, and community programming to maximize their reach in Black communities. These supports need not stand alone, but can be integrated into other behavioral health interventions (e.g., counseling, parent coaching, behavioral medicine).

The finding that child behavior problems dip in a meaningful way (effect size > 0.450; *p*-value < 0.001) provides additional evidence for the efficacy of interventions and supports designed to improve RSC in Black families. In general, these findings confirm the importance of interventions like EMBRace, which both provides coping skills to parents and strengthens racial socialization competency. Beyond EMBRace, this study holds implications for broader family practice with Black youth and caregivers. While the structure of this SEM did not allow for definitive conclusions about the role of RSC *between* parental racial worry about child behavior problems to be drawn, we can still glean helpful information about the relations between RSC and each of its model anchors (i.e., worry, child behavior problems). This study found that regardless of subtype, racial socialization competency is correlated with parental racial worry. Though, the negative association between parental racial worry and RSC "Call to Action" Stress was larger in effect size. We also found that regardless of subtype (i.e., stress vs. confidence), RSC mediates the effects of parental racial worry on child behavior problems. Interventionists may choose to enhance their practice by engaging in Socratic Questioning with parents, inviting their own deep reflections about the worries about racial discrimination they hold for their children. Psychoeducation that encourages applying neither positive nor negative interpretation of these worries would likely be beneficial, as most psychological intervention suggests that worry should be minimized. Based on the findings in this study, problematizing that strict view

of worry and inviting parents to consider the ways in which that worry drives their RSC and general RS practice may be impactful for both parents and children in that family unit. Further, when an RS (or other) intervention addresses these underlying components of RS, emphasis should be placed on the fact that *overall* RSC is a good thing for families. And that the natural stressors (e.g., "Call to Action" Stress) that occur as part of preparing children to experience racism are just as important for that protective process for Black children as those feelings of efficacy and confidence.

Implications for Research

The practices and policies of psychologists are informed by research. If we are to develop anti-racist practices and policies, as the calls to action of 2020 and beyond demand of us, we must first overhaul and reimagine our research methods and purpose. Often framed as seeking generalizable results and understanding "universal" meaning-making tools, psychological science is a post-positivistic discipline that would gain much through integration with more human-centered conceptual frameworks. Psychologists must learn to tap into the wisdom and power of communities through participatory methods and counter-storytelling. Psychologists must problematize the prevailing theories and methods of our field and ask critical questions about fit with populations. Most importantly, psychologists must derive inspiration for intervention from the people we aim to serve. While simply stated, these changes would require a significant shift in framing for most researchers and practitioners in psychology today. In utilizing positionality, centering culture, and grounding itself in CRT and QuantCrit, this study represented a departure from traditional quantitative methods, most especially sophisticated statistical modeling techniques. However, the study lost *nothing* by centering lived experiences or the ecological experiences of the participants. In fact, some would argue that, by employing

multiple, overlapping epistemological perspectives, the study has overall firmer footing for interpretation and informing future, related research. For example, the logical next step in this program of research could include further quantitative investigations of this model and related alternatives; next steps could also include subsequent mixed-methods design, wherein the results from this study inform qualitative research; lastly, standalone qualitative research could be planned based on these results, but not require any conceptual link to this study. This flexibility in inquiry and design is granted by the robustness of theory, concepts, and method. I would argue that this level of depth in quantitative research is a goal to strive for, though it is not without its challenges.

Limitations

Statistical Challenges with Model

As described in Chapter 4, the original model as hypothesized suffered significant multicollinearity and suppression effects (Grewal et al., 2004. The four hypothesized parallel mediator terms were derived from the same instrument and its subscales. Skills & Confidence were identified as highly correlated in prior research (Anderson et al., 2021), but they had not been modeled as parallel predictor/mediator variables in structural equations modeling specifically. This study revealed that they are ill suited as parallel mediator terms due to the high correlation they have with one another, and, potentially, that the items share much of their language despite being from different subscales. A similar issue arose between RSC General Stress and RSC "Call to Action" Stress. These two terms were derived from the same *subscale* of the same instrument; the psychometric validation study of the instrument uncovered two factors, but, when applied in SEM, the correlation was too high to differentiate variance contribution. These challenges were addressed according to best practice in SEM, and the study proceeded

with meaningful conclusions. However, these issues still created challenges and prevented the full, original hypothesized model from operating successfully. These are not unheard of issues in psychometric literature, but future research using this instrument and those with similar structure will require thoughtfulness to navigate these issues smoothly.

Lastly, though the final model used in this study was not identical to the original hypothesized model, much was gained from this research. This process of adjustment and discovery is in part the purpose of studies like this one. This study allowed us to use theory, sophisticated statistical approaches to study adjustment, and trial and error to determine the best possible arrangement of the constructs of interest. Many other trials of experimentation with this model can follow those outlined in this study. For example, additional constructs could be refined through CFAs and modeled alongside the other constructs. Further, additional paths could be added or covariance paths could be specified. The efforts of this study were bound by theory, conceptual models, reviewed literature, and approved research questions. The next wave of research could expand in any of these areas, ask new questions, and divine new leads in this scholarship space.

Limitations to Pursuing Intersectionality in this Research

Intersectional considerations were unfortunately limited in this project. First, after the proposal of this project, another study found no gender differences in racial socialization competency, both overall and by subtype (EMBRace Lab, personal communication, March 6, 2022). This was one of the intended sites of intersectional analyses. Analyses of gender differences in parents were attempted with the Parental Racial Worry latent variable, but it resulted in a failure in model convergence. This limitation can either be conceptualized as a challenge in planning or a challenge with the inflexibility of this research method.

From the planning perspective, future studies addressing racism-related constructs with SEM should be planned to ensure that the study can proceed with meaningful gender difference testing. From a flexibility perspective, one could argue that stopping all efforts at pursuing gender and intersectionality analyses because the model failed is the result of a lack of imagination. Buchanan and colleagues (2021) have called on psychologists to approach such challenges with imagination. Indeed, these methods were not designed to answer these questions. This challenge is reminiscent of the Audre Lorde essay title, "The Master's Tools Will Never Dismantle the Master's House." If we are to examine the experiences of systemic oppression and those effects on Black people, it should be of no surprise that the latitude allowed by currently prevailing methods may be limited.

Future Directions

Follow-up Studies

Two follow-up studies are planned to continue exploring issues raised and addressed in this dissertation. The first study will be a quantitative examination of gender differences on all constructs explored in this dissertation. It was the original intention and analytic plan of this dissertation to allow parent gender and child gender *each* to co-vary with the model to explore gender differences. However, the efforts required to fine-tune the model and examine the psychometric properties of each instrument were both greater than anticipated. Ultimately, like many other study components, this aspect of the study was postponed until after the completion of the dissertation. This choice was done based on timing and prioritization of dissertation completion, rather than a belief that gender bears no weight in considerations of RS in Black families. In fact, prior research with both qualitative and quantitative methods demonstrates important considerations for Black female caregivers (e.g., mothers) compared to Black male

caregivers (e.g., fathers), and different patterns of parental concern for Black boys compared to Black girls (Cooper et al., 2015; Scottham et al., 2009). An additional review of the literature for concerns related to gender as it functions in Black families will guide the development of research questions and hypotheses for this study.

The second follow-up study will present the findings of exploratory and confirmatory factor analyses with this sample. The author is aware that many scholars are currently working with these data, and such manuscripts might be underway. Thus, the writings and results of the psychometric analyses will be shared with the PI who collected this data in an effort to streamline the dissemination of this important information. The efficient, evidence-based intervention of racial stress and trauma in Black families requires accurate assessment prior, during, and following treatment. Strengthening the rating scale batteries for these issues only serves to improve care for Black community members. In addition to manuscript writing, the psychometric analysis results will be shared at national scholarly meetings and conferences.

The third and final follow-up study will use the tenets of PsyCrit (Crossing, 2022) to design qualitative research to address racial socialization competency and racialized school and academic concerns for Black parents. The intended method is intergenerational narrative inquiry with parent and child dyad interviews as the data source. It is the belief of this author that school-based services might serve as an important setting in which to improve racial climate and racial socialization.

Relevance to School Psychology: Imbedding RS in Schools and Communities

For the last decade, a minority of RS scholars have sought to examine the role that RS *outside* of the home has in the lives of Black children and adolescents. One such area of inquiry is into school ethnic-racial socialization (Hughes et al., 2011; Aldana & Byrd, 2015; Byrd, 2015;

Byrd & Hope, 2020; Saleem & Byrd, 2021; Byrd & Legette, 2022). As calls for supplemental RS to bolster efforts at home have increased, new ground-breaking literature has risen to fill the observed gap (Ruck et al., 2021). Most relevant to the ecological theories that guide many child services, including school based practice, is the modeling of ethnic-racial socialization for school settings (Saleem & Byrd, 2021). One potential benefit of improving RS in schools is that it could ease the burden on parents of children of color for imparting the important knowledge gained from healthy RS. Thus, it is of particular interest to the topic of RS within Black families to continue to explore and develop means to maximize RS in schools.

School climate is one of many operationalized constructs that attempts to capture students' perceptions and experiences of the school environment. In other words, this concept aims to capture the lived, psychological experiences of students rather than describing the climate itself (Byrd, 2015). An important sub-section of school climate is *school racial climate*, or the school climate related to diversity, race, and race-related constructs (Banerjee et al., 2018; Byrd, 2015; Cohen et al., 2009; Stevenson, 2014). Racial socialization is one of two subcomponents of school racial climate, with the other being interpersonal interactions (Byrd, 2015). Booker (2006) and colleagues found that the efforts school personnel make to imbue their schools with representation and culturally sensitive programming and interventions have a positive relationship with student identification with academic material. The reverse of this finding is also present in the literature. When fostering a positive school racial climate is poorly executed, academic outcomes for students of color have been found to suffer (Byrd, 2015; Dotterer et al., 2009; Huynh & Fuligni, 2010). As scholars have sought to identify measurable and powerful contributors to positive school racial climate, racial socialization has arisen as a promising source (Byrd, 2014; Saleem & Byrd, 2021).

RECAST Inquiries

This study addresses only a fraction of the potential understanding that can be yielded from tests of RECAST. For example, the SEM in this study does not include racial coping or coping self-efficacy. Several ongoing studies are working to address these constructs and further test RECAST. Implications from this set of studies can lend robust support to our understanding of how racial socialization competency operates in Black families; this understanding in turn will allow for nuanced development of RS-based interventions across multiple settings. Given the robust support for the importance of this often-naturally occurring protective factor, these interventions may be natural sites for grant funding that aims to reduce racism-based health disparities and maximize outcomes for Black youth and families.

Critical Race Theory and QuantCrit were important critical framing for this quantitative exploration of Black familial factors. The application of these frameworks strengthened the design and interpretation of data such that the experiences of Black folks were more fully conceptualized than some literature in psychology. Notably, this study fell short of meaningful integrations of intersectionality. Potential follow-up studies that would more meaningfully address these issues were outlined above. Regardless of the CRT merits of *this* study, it is the belief of the author that continued application of Critical Race Theory and its variants will only strengthen the benefits psychological science and practice can bring to *everyone*, and not a select few (Henrich et al., 2010; Martín-Baró, 1994).

Notably, Critical Race Theory does not find a natural home in psychology, a field that favors post-positivistic empiricism and production of generalizable research findings (Adams & Salter, 2011; Teo, 2018). Critical inquiry must be allowed entry if psychology is to maximize its potential for equity in research. To investigate and truly understand race within a psychological

frame, a blending of methodologies and epistemologies is warranted. This blend opens the door to diverse methods (e.g., qualitative, mixed methods) and fitting epistemologies (e.g., critical, constructivist) to aid in our understanding of how this social construct affects those we aim to support through research and practice. Critical frameworks to aid psychological scholars in considering relevant contextual factors related to race are being published with increasing frequency (Buchanan et al., 2021; Crossing et al., 2022; Lorien et al., 2021). These existing breakthroughs—and those yet to come—can demonstrate that there are many paths to conduct racially-just science.

Conclusion

This dissertation—like many before it—was a wide-ranging and ambitious effort. In this case, the proposed study aimed to combine Critical Race Theory and quantitative techniques into an unlikely pair to chase answers to questions about the psychology of racism as it operates in Black families. The history of quantitative methods is fraught with questionable claims of being value-free and neutral as well as by-design connections with eugenics movements (Goodwin, 2015; Martín-Baró, 1994). On the other hand, Critical Race Theory was born out of the need for tools of meaning-making that speak to the realities of white supremacy, systemic racism, and any number of oppressive forces (Ladson Billings & Tate, 1995; Crenshaw, 1995). The blessings of time and progress have allowed these two seemingly opposed approaches of viewing the world to coalesce for the sake of informing the development of clinical tools of psychological liberation for Black families. Indeed, an entire sub-field of Critical Race Theory, QuantCrit, emerged to bridge these two seemingly incongruent epistemologies. Other framings push CRT into psychology further still (Crossing et al., 2022).

This study leaned heavily on the tenets of QuantCrit, especially the centrality of oppression and acknowledgements that these data cannot speak for themselves (QuantCrit citations). These rating scale responses from Black parents were not collected in a vacuum; parents answered these questions in the context of the #BlackLivesMatter movement and all the trauma and strength that has come with it. *These data were not obtained in a vacuum*; in an effort to seek mentorship in studying racist-incident-based trauma, the author of this dissertation emailed a leading expert in racism and Black psychology to ask for guidance. The result was an invitation to join them in this work. *These data were not analyzed in a vacuum*; they were analyzed across two years under leadership of several chairs, because studying the psychology of racism is a challenging choice in a health service psychology training program. *And these data were not interpreted and written up in a vacuum*; by the time this Discussion was written, the author of this dissertation had published their own praxis framework for CRT in psychology. To read this dissertation, and indeed, this discussion *outside* of the context of the lived experiences of all of those involved would be only a cursory read of this work. Instead, it is the hope of this author, that the very real lived realities, worries, and RS accomplishments of the Black parents featured in these pages come through clearly.

The first overarching conclusion of this study is that the theoretical relationships between parental general stress, parental racial discrimination stress, parental racial worry, racial socialization competency, and child behavior outcomes outlined in this study are supported by meaningful statistical ties to one another within SEM. These relationships bore out in the data from both a perspective of a directional SEM and the analysis of individual, zero-order correlation between individual constructs. Thus, this study lends some support to the RECAST model, but does not serve as direct, broad support for that model, as only a fraction of RECAST

was modeled here. Most importantly, this study serves as additional statistical foundation for a theoretical model currently being explored through many means, including latent class analysis, multiple regression, and qualitative open coding of video footage of Black parent-child dyads.

Research questions two through four concerned the directionality and strength of statistical relations between specific outlined constructs. These questions were written and analyzed for the sake of informing assessment and intervention of RSC in Black families. Importantly, we found that parental racial discrimination stress is a more robust predictor of parental racial worry than is general stress. In short, racial discrimination distress is distinct from general stress, and interacts with other racism-related psychological experiences directly. It influences not only individual psychology, but, in the case of parents and caregivers, their family dynamics and the outcomes of their children. Providers who already screen for depression and anxiety (e.g., internists, primary care providers, psychiatrists, pediatricians) for the sake of informing referrals or additional supports, can add important questions about racism-specific distress to their roster of screening questionnaires. Having associated support available (just as are available post-screening for anxiety or depression) could be an incredible first step in addressing the public health crisis that is racism. Psychological science has not historically served those experiencing oppression (Martín-Baró, 1994; Heinrich, 2010). This study demonstrates that it is both possible—and imperative—that it does exactly that.

APPENDICES

APPENDIX A: Worries About Racial Profiling Scale

Please indicate how worried you are regarding your child's encounters with others in public spaces when you are not around them:

Not at all worried	Not very worried	Somewhat worried	Very worried	Extremely worried

1. That your child will be racially mistreated by peers at school?
2. That your child will be perceived as not smart enough because of their race?
3. That your child will experience random acts of violence walking through your neighborhood because of their race?
4. That your child will be called or thought of as racist?
5. That your child will racially mistreat others when you are not around?
6. That your child will use a racial slur against a person of color?
7. That teachers will hold low expectations of your child because of their race?
8. That your child will be false accused of a crime because of their race?
9. That if your child is stopped by the police that they will be physically harmed?
10. That your child will be excessively disciplined for misbehavior at school?
11. That your fears about racial injustice toward your child will interrupt your sleep or concentration?
12. That teachers will underestimate your child's commitment to learning because of their race?
13. That strangers will misperceive your child's behavior as criminal?
14. That you might be wrong about others misjudging your child because of their race?
15. That your child will not develop a positive appreciation of their racial background?
16. That your child will use a racial slur against someone of their own racial background?
17. That your child will behave in ways that support a negative racial stereotype of them?
18. That other people will negatively judge your parenting based on a racial stereotype?
19. That teachers will withhold instruction from your child because of their race?
20. That police officers will withhold protection from your child because of their race?
21. That teachers out of ignorance will mishandle an encounter with your child because of their race?
22. That your child will receive low expectations and not challenged to do their best by teachers?

APPENDIX B: Racial Socialization Competency Scale (RaSCS)

Parents may have conversations with their children about a variety of topics. For column A, read "I believe I can" and then read the statement. Click the drop-down menu and select the answer that best indicates your belief in that statement. Repeat that for column B, which reads "I am/would be prepared to," and column C, which reads "I am/would be stressed to."

1. Share my emotions about my experiences of negative racial encounters.
2. Share my emotions about my positive racial encounters.
3. Teach my child to speak up if they are racially mistreated by a non-authority person (e.g., peer, an adult, family member) of the same race.
4. Teach my child to speak up if they are racially mistreated by a non-authority person (e.g., peer, an adult, family member) person from another race.
5. Teach my child to speak up if they are racially mistreated by an authority figure (e.g., teacher, police) of the same race?
6. Teach my child to speak up if they are racially mistreated by an authority figure (e.g., Teacher, police) of another race.
7. Teach my child to share their feelings about history of racism and slavery.
8. Teach my child to share their feelings about police shootings of people of color.
9. Teach my child to listen to a peer or partner who has been racially mistreated.
10. Teach my child to correct a friend's racial stereotyping of others.
11. teach my child to know what to say and do If they get stopped by police while walking or driving.
12. Teach my child to speak up if they witness peers being racially mistreated.
13. Teach my child to notice other people's stressful reactions during a negative racial encounter.
14. Teach my child to engage rather than walk away from a negative racial encounter with another person.
15. Teach my child to discuss history and contributions that their culture and race have made to society.
16. Teach my child to notice when negative racial encounters have occurred.
17. Teach my child to openly share how they feel about their racial background.
18. Teach my child to notice lies and stereotypes of racial matters in media and information outlets.
19. Teach my child to express styles, languages, and communications of their culture in school
20. Teach my child to resolve a negative racial encounter with their peers.
21. Teach my child to notice how stressed they are during a negative racial encounter.
22. Teach my child to initiate a conversation about race with peers.
23. Teach my child to ask for help when they are stressed from a negative racial encounter.
24. Teach my child to use relaxation strategies to reduce their stress during a negative racial encounter.
25. Teach my child to speak up if someone of the same race uses a skin color slur against them.
26. Teach my child to speak up if someone of a different race uses a skin color slur against them.

27. Teach my child how to respond to "colorblind" statements.
28. Teach my child the way we should or should not trust people from different races.

APPENDIX C: Perceived Stress Scale, 10-item

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you with be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them, and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

**Underlined items are reverse-scored*

For each question choose from the following alternatives:
0 – never
1 – almost never
2 – sometimes
3 – fairly often
4 – very often

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and "stressed"?
4. <u>In the last month, how often have you felt confident about your ability to handle your personal problems?</u>
5. <u>In the last month, how often have you felt that things were going your way?</u>
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. <u>In the last month, how often have you been able to control irritations in your life?</u>
8. <u>In the last month, how often have you felt that you were on top of things?</u>
9. In the last month, how often have you been angered because of things that happened that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

APPENDIX D: Racism and Life Experiences Scales, Brief

1. Overall, DURING YOUR LIFETIME, how much have you personally experienced racism, racial discrimination, or racial prejudice?
2. DURING THE PAST YEAR, how much have you personally experienced racism, racial discrimination, or racial prejudice?
3. Overall, how much do you think racism affects the lives of people of your same racial/ethnic group?
4. Think about the people close to you, your family and friends. In general, how much has racism impacted their life experiences?
5. In general, how do you think people from your racial/ethnic group are regarded in the United States?
6. In general, how frequently do you hear about incidents of racial prejudice, discrimination, or racism from family, friends, co-workers, neighbors, etc.?
7. In general, how much do you think about racism?
8. In general, how much stress has racism caused you DURING YOUR LIFETIME?
9. In general, how much stress has racism caused you DURING THE PAST YEAR?

APPENDIX E: Brief Problem Monitor-Parent

Items from the Brief Problem Monitor-Parent Form (BPM-P) for Ages 6-18

Below is a list of items that describe children and youths. Please rate each item to describe your child **now or within the past __ days**. Please circle the **2** is the item is ***very true*** of your child. Circle the ***2*** if the item is ***somewhat true*** of your child. If the item is ***not true*** of your child, circle the ***0***. ***Please answer all items as well as you can, even if some do not seem to apply to your child.***

0 = Not True (as far as you know) **1 = Somewhat True** **2 = Very True**

0	**1**	**2**	1. Acts too young for his/her age **ATT**
0	**1**	**2**	2. Argues a lot **EXT**
0	**1**	**2**	3. Fails to finish things he/she starts **ATT**
0	**1**	**2**	4. Can't concentrate, can't pay attention for too long **ATT**
0	**1**	**2**	5. Can't sit still, restless, or hyperactive **ATT**
0	**1**	**2**	6. Destroys things belonging to his/her family or others **EXT**
0	**1**	**2**	7. Disobedient at home **EXT**
0	**1**	**2**	8. Disobedient at school **EXT**
0	**1**	**2**	9. Feels worthless or inferior **INT**
0	**1**	**2**	10. Impulsive or acts without thinking **ATT**
0	**1**	**2**	11. Too fearful or anxious **INT**
0	**1**	**2**	12. Feels too guilty **INT**
0	**1**	**2**	13. Self-conscious or easily embarrassed **INT**
0	**1**	**2**	14. Inattentive or easily distracted **ATT**
0	**1**	**2**	15. Stubborn, sullen, or irritable **EXT**
0	**1**	**2**	16. Temper tantrums or hot temper **EXT**
0	**1**	**2**	17. Threatens people **EXT**
0	**1**	**2**	18. Unhappy, sad, or depressed **INT**
0	**1**	**2**	19. Worries **INT**

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