Summer 8-2023

The Impact of Covid-19 Stressors, Racial Discrimination, and Racial Socialization on Family Functioning in Black Families

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by

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B.S. December 2012, Virginia State University
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A Dissertation Submitted to the Faculty of
The Virginia Consortium Program in Clinical Psychology in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

CLINICAL PSYCHOLOGY

THE VIRGINIA CONSORTIUM PROGRAM IN CLINICAL PSYCHOLOGY
August 2023

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ABSTRACT

THE IMPACT OF COVID-19 STRESSORS, RACIAL DISCRIMINATION, AND RACIAL SOCIALIZATION ON FAMILY FUNCTIONING IN BLACK FAMILIES

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Marginalized communities, specifically Black Americans, have been disproportionately impacted by the COVID-19 pandemic which has resulted in more hospitalizations and deaths within this particular community. However, this disproportionate impact of COVID-19 is likely the result of ongoing health disparities related to a lack of access to adequate healthcare. In addition to health disparities specifically related to COVID-19, Black Americans have also experienced public displays of racial discrimination resulting from the systemic racism that has occurred for many years. It has been determined that stress spillover can impact relationship factors and this same spillover may be an important factor by which health disparities and experiences related to racial discrimination may spill over into family functioning and relationships within Black families. Therefore, the present study sought to examine the impact of perceived racial discrimination on the relationship between COVID-19-related stressors and family functioning as well as the impact of experiences of racial socialization on these relationships. It was hypothesized that race would moderate the relationship between COVID-related stressors/risk and family function. It was also hypothesized that racial discrimination would moderate the relationship between COVID-related stressors/risk and family function in Black families. Lastly, it was expected that the moderating effect of racial discrimination would be conditional based on experiences of racial socialization within Black families.

This dissertation is dedicated to my support system. Family IS important; I don't know where I would be without your endless love, support, and encouragement.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my mentor, Dr. James Paulson for his support and guidance not only during my dissertation, but throughout my entire graduate school journey. I would also like to thank my committee members, Dr. Desideria Hacker and Dr. Michelle Kelley, for not only their support but additional contributions and insights. Without them, completing this dissertation would have been impossible. I will forever be grateful to you all.

I would also like to recognize my parents, partner, siblings, best friend, and extended family, for their never-ending support and encouragement. Without you all, I know that I would have not made it here. You have believed in me and instilled values that I will carry with me always. No matter what I have wanted to do, you all have supported me 100% and this journey has been no different. You all have provided me with great examples of strength, resilience, and dedication. I am so grateful to have you all by my side and in my corner as I navigate this crazy but rewarding life.

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INTRODUCTION

The COVID-19 pandemic has had a significant impact globally, however, specific populations have been impacted at significantly higher rates than others (Haynes, Cooper, Albert, & Association of Black Cardiologists, 2020; Miconi et al., 2020). Minoritized individuals, specifically Black, Latinx/Hispanic, Asian American, and Native Americans have suffered tremendously. Although Black individuals only comprised 18% of the population, the US Centers for Disease Control and Prevention found that they were 33% of the population hospitalized as a result of COVID-19 and were disproportionately represented among individuals who were placed on ventilators which was associated with a 67% mortality rate (Haynes et al., 2020). Additionally, Miconi and colleagues (2020) conducted a study in Quebec, Canada which revealed that ethnically diverse populations were significantly more negatively impacted by COVID-19, with 38.72% of individuals exposed to COVID-19 being part of the Black community, making them the most at-risk population. In addition to Black Americans being disproportionately impacted by COVID-19, they have a long history of experiences of racial discrimination (Addo, 2020; Ruiz, Horowitz, & Tamir, 2020). Although individuals have experienced racial and ethnic disparities directly related to COVID-19, throughout the pandemic the Black community has also had to deal with publicly prominent examples of racial discrimination related to the murders of multiple Black individuals including Ahmaud Arbrey, George Floyd, Breonna Taylor, and many others (Barber, 2020; Laurencin & Walker, 2020). Disparities related to COVID-19 and public displays of racial discrimination are just recent examples of the systemic racism that has occurred for many years in these same ways.

Minoritized populations continue to suffer from a lack of access to adequate care as a result of significant health disparities which have led to increases in negative health outcomes such as hypertension, diabetes, obesity, cardiovascular disease, chronic lung disease, kidney disease, cancer, mother and infant mortality, and ultimately lower life expectancy (Haynes et al., 2020; Laurencin & McClinton, 2020; Rodriguez, 2018; Watson et al., 2020; Yancy, 2020). Additionally, these same minoritized populations continue to encounter acts of racial discrimination which include experiences of police brutality, mass incarceration, stereotyping, unconscious bias, and prejudice among many others (Laurencin & Walker, 2020). These experiences highlight distinct issues related to health disparities within minoritized populations as a result of racial bias and discrimination which occur systemically throughout the world. Stress spillover occurs when stressors external to a particular relationship impact relationship factors such as satisfaction and behaviors related to the relationship (Buck & Neff, 2012; Randall & Bodenmann, 2008). Extant research has revealed that when individuals are impacted by situations outside of the home, such as work-related stressors and experiences of racism and discrimination, it can disrupt the family dynamics and relationships within the home (Coll et al.,1996; Conger, Conger, Martin, 2010; Masarik & Conger, 2017). Stress spillover may be an important factor by which an individual's experiences related to racial discrimination and health disparities may in fact impact family functioning and relationships (Buck & Neff, 2012; Randall & Bodenmann, 2008). However, existing literature has examined racial socialization as a protective factor for families experiencing racial discrimination (Anderson et al., 2019). Although there have been separate studies addressing the impact of COVID-19 (Daks, Peltz, & Rogge, 2020), racial discrimination (Addo, 2020; Ruiz et al., 2020), and racial socialization (Anderson et al., 2019; Jones & Neblett, 2019) on family dynamics, a review of the current

literature did not identify any studies that connect all of these variables. The purpose of the current study was to examine the impact of perceived racial discrimination on the relationship between COVID-19-related risk/stressors and family functioning as well as the impact of racial/ethnic socialization on these relationships. Better understanding the impact of racial discrimination and racial socialization on Black families may assist in reducing the effects of racially charged incidents and experiences. Additionally, these findings may create increased opportunities to implement prevention and intervention strategies to navigate the management of experiences related to racial discrimination, foster more positive and healthy family dynamics, gain insight on more effective ways to deal with stressors, and shed light on the severity of the impact of health disparities and systemic racism on minoritized populations, specifically Black Americans.

COVID-19

The first case of the Coronavirus Disease 2019, also known as COVID-19, was documented in December 2019 and is defined as a respiratory disease that has been found to cause Severe Acute Respiratory Syndrome (SARS; Fauci et al., 2020). COVID-19 has had global impacts and has resulted in quarantining and social distancing (Daks et al., 2020; Miconi et al., 2020). While COVID-19 has impacted the entire world with 173 million cases and approximately four million deaths, there have been over 33 million cases and over 600 thousand deaths in the United States. Within the U.S., there have been approximately two million cases (11.3 percent) and 56 thousand deaths (13.7 percent) for Black Americans who are only 18 percent of the population (Centers for Disease Control and Prevention (CDC), 2021; Laurencin & McClinton, 2020). Additionally, there have been almost five million COVID-19 cases (28.8 percent) for Latinx/Hispanic individuals and approximately 76 thousand deaths (18.7 percent)

despite being 18.45 percent of the U.S. population. When compared to their White counterparts, Black individuals are 1.1 times more likely to contract COVID-19 but 2.9 times more likely to be hospitalized and 2 times more likely to die as a result of COVID-19. Similarly, Latinx/Hispanic individuals are 2 times more likely to contract COVID-19, 2.8 times more likely to be hospitalized and 2.3 times more likely to die than their White counterparts (CDC, 2021). However, it is important to remember that these data are only what has been collected by the CDC and information about race/ethnicity is not always collected, therefore we can assume that the actual numbers and percentages are likely higher. Laurencin and McClinton (2020) and Yancy (2020) also reported that cities that had significantly higher proportions of Black people such as Boston, Detroit, Chicago, New Orleans, Philadelphia and New York became the "hot spots" for COVID-19 indicating that the spread of COVID-19 may have occurred more rapidly due to Black individuals living in such close proximity which has led to more infection. This increased infection likely occurred due to an increased risk of exposure as many Black individuals were not able to work from home due to holding jobs that were considered to be "essential" (Laurencin & McClinton, 2020).

Racial Discrimination

Racial discrimination is defined as the unequal treatment of individuals based on race and/or ethnicity. However, racial discrimination has been defined in two parts based on treatment that occurs as a result of race, also known as differential treatment, and disparate impact, which is discrimination based on rules and procedures created that accommodate one group of people over others (Pager & Shepherd, 2008). Several researchers have found that everyday racial discrimination such as lack of courtesy and/or respect, being threatened or harassed, and/or being insulted or called names is a chronic stressor for Black individuals (Ajrouch et al., 2010; Lavner

et al., 2018). There are also biological consequences related to these increases in stress related to racism, such as changes in immune function which can contribute to comorbid health diagnoses such as diabetes, hypertension and asthma, which were found to impact Black individuals at a higher level (Ajilore & Thames, 2020). Previous research has found that racial discrimination is a stressor for adults individually, as well as within the family as children and adolescents are also impacted by racial discrimination (Anderson & Stevenson, 2019; Anderson et al., 2019). In addition to racial discrimination being a chronic stressor, a meta-analysis conducted by Pascoe and Richman (2009) found that perceptions of racial discrimination are associated with poorer physical and mental health. Similarly, Ajrouch and colleagues (2010) found a significant positive association between everyday experiences of racial discrimination and psychological distress in African American women with small children. Lavner and colleagues (2018) explored the associations between racial discrimination, relationship stability and instability, and physical and psychological aggression. Results revealed that both men and women experienced racial discrimination and it was negatively associated with relationship satisfaction. More specifically, men with higher levels of experienced racial discrimination had higher levels of psychological aggression and relationship instability, while women in similar situations had higher levels of physical aggression (Lavner et al., 2018). Additionally, Kerr and colleagues (2018) conducted a study with Black fathers and determined that racial discrimination was negatively associated with relationship quality and perceived stress with perceived stress mediating the relationship between racial discrimination and relationship quality. More recently, in light of COVID-19 and the related health-disparities associated with it as well as increases in public attention to police brutality and the murders of Black Americans, more individuals are taking notice of these factors

and are having more discussions related to the need to implement changes within the system (Anderson et al., 2020; Wakeel & Njoku, 2021).

COVID-19 and Racial Discrimination

Several studies have determined that minoritized populations have been disproportionately impacted by COVID-19 both physically and mentally, especially Black, Latinx/Hispanic, Native and Asian American communities (Haynes et al., 2020; Miconi et al., 2020; Ruiz et al., 2020; Watson et al. 2020). Asian Americans have experienced both verbal and physical discrimination, with individuals calling COVID-19 the "Chinese virus" as COVID-19 allegedly developed in China. Researchers have stated that COVID-19 has become a reason for individuals to act on the prejudice and discrimination that has been occurring for years against Asian Americans. As a result of this prejudice, Asian Americans have had to endure verbal abuse, such as name calling and jokes, and even physical abuse such being physically attacked (Miconi et al., 2020; Ruiz et al., 2020; Watson et al., 2020). Similar to Black Americans, approximately 34 percent of COVID-19 cases in the United States have occurred in the Latinx/Hispanic community, when they comprise of only 18 percent of the U.S. population (Tai et al., 2021). While the research has identified racially and ethnically diverse individuals as being disproportionately impacted by COVID-19, we must also take into consideration the fact that much of the information on race and ethnicity was not collected at the beginning of the pandemic, therefore, the information we do have is only a portion of these individuals and we can expect the actual proportions and percentages to be higher (Fortuna et al., 2020; Tai et al., 2021). For Native Americans, although the research indicates that individuals within this community are also being significantly impacted by COVID-19, when these individuals are added into the CDC-reported cases, they are placed in the "Other" category, which also makes it

difficult to track just how impacted this community is (Fortuna et al., 2020). Haynes and colleagues (2020) reported that in New Mexico, Native Americans account for only 11 percent of the population, however they accounted for 37 percent of the positive COVID-19 cases. In Arizona, Native Americans are only 5.3 percent of the population but make up 13 percent of positive cases and 18 percent of COVID-related deaths (Tai et al., 2021).

Extant research has discovered that factors such as pre-existing conditions including hypertension, diabetes, obesity, cardiovascular disease, chronic lung disease, asthma, and kidney disease are all risk factors associated with poorer outcomes related to COVID-19. Many of these risk factors are found at higher rates in marginalized communities, which may be one contributing factor as to why these communities are being disproportionately impacted by COVID-19 (Baptiste et al., 2020; Haynes et al., 2020; Laurencin & McClinton, 2020; Watson et al., 2020). Black Americans reportedly have the highest prevalence of hypertension and kidney disease while Native Americans have the highest prevalence of diabetes and Latinx/Hispanics have similar prevalence rates as both Black and Native Americans (Haynes et al., 2020). In addition, these individuals with underlying health conditions are very likely to already struggle to receive the most basic treatment related to physical and mental health due to a number of barriers that include racism, classism, and lack of access to care and transportation (Miconi et al., 2020; Watson et al., 2020). Additionally, Black Americans have suffered as a result of both economic and social disparities in relation to adequate healthcare, sufficient housing, education, and employment which have led to poverty (Laurencin & McClinton, 2020; Miconi et al., 2020; Watson et al., 2020). Aside from the physical impacts and increased risk of COVID-19 on marginalized communities in general, recent literature has identified specific hardships in the Black community, including economic stress, the loss of employment, risking safety to continue

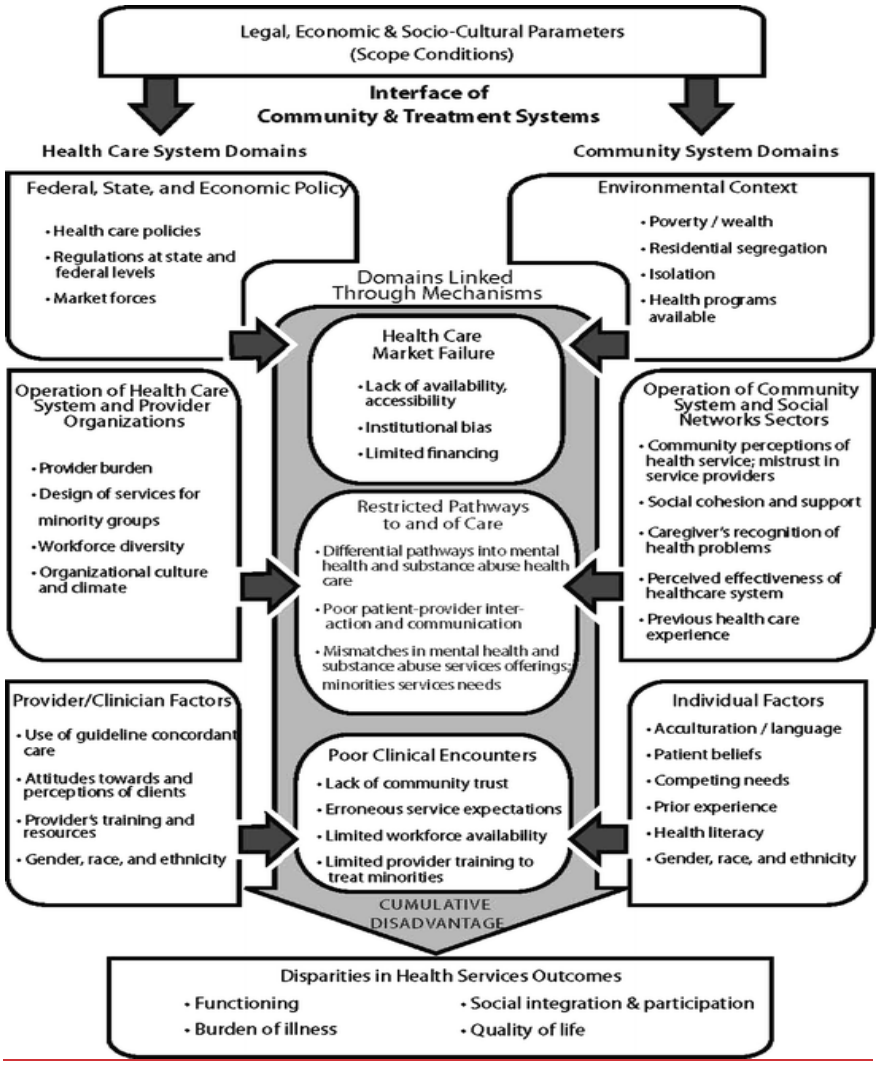
to work, taking on additional roles such as having to teach children, worry related to catching COVID-19, and being quarantined with family members or not seeing family for extended periods of time (Daks et al., 2020).

Health Disparities Theoretical Framework

The socio-cultural framework for health services disparities (SCF-HSD) developed by Alegría and colleagues (2009) originally focused on health disparities related to mental health and substance abuse, however it has been applied broadly with multiple other types of health disparities. This framework is comprised of two essential systems that are believed to create health disparities: 1) health care and 2) community systems. Within each of these systems are three levels of operation: 1) the societal level, which includes the environmental context or federal, state or economic policies, 2) the organizational level, which includes formal organizations or the operation of community systems, and 3) the individual level, which includes factors related to patients and providers. Each level of the two systems is thought to interact and create "mechanisms of inequality and bias" that lead to the disparities in the health and health care of minoritized populations. A unique aspect of this model is the importance of culture throughout the entire model as a means to understand its impact and processes not only in individuals but within communities and health service systems (see Figure 1; Alegría et al., 2009, pp. 4371; Alegría et al., 2011). This framework posits that while factors such as lack of insurance, lack of access to quality care or care at all due in part to bias and stereotypes are the cause of the health disparities in minoritized populations, changes to these systems and levels can decrease these disparities. These changes can occur through modifying the current structure of service models by encouraging increase in patient empowerment, more effective communication between patient's and providers, new policies that make services more

accessible, and reducing the ways in which patients and providers rely on stereotypes and prejudice in decision making (Alegría et al., 2009; Alegría et al., 2011). While this is still an emerging model, studies have been implemented and included the SCF-HSD when assessing mental health disparities in Asian Americans with psychiatric disorders and Latino children with Autism Spectrum Disorder (Lopez, 2014; Nguyen & Bornheimer, 2014). Within the current study, the SCF-HSD framework can assist in understanding the ways in which cultural experiences in racially/ethnically diverse individuals impact and are impacted by experiences of racial discrimination and health disparities.

Figure 1: *The Socio-cultural Framework for Health Services Disparities (SCF-HSD)*



Racial Socialization

Racial socialization can be defined as both the verbal and non-verbal communications relayed to individuals about race, specifically from adults to children. Hughes and colleagues (2006) suggested that there are four dimensions of racial socialization which include cultural socialization, preparation for bias, promotion of mistrust, and egalitarianism. *Cultural socialization* involves practices that teach children about their racial/ethnic history, culture, and traditions. *Preparation for bias* refers to the education of children regarding discrimination and coping skills to manage those experiences. *Promotion of mistrust* places focus on the distrust of and separation from other racial/ethnic groups. Lastly, *egalitarianism* encourages children to place value on the individual characteristics of others rather than membership into a particular racial/ethnic group (Caughy et al., 2011; Hughes et al., 2006).

Extant research has had discrepancies in findings related to the relationship between racial socialization and both child and youth outcomes. Some findings have indicated children with more racial socialization experiences have better results in school as well as higher cognitive abilities (Caughy et al., 2006) while other findings have determined that increased racial socialization has no impact on child outcomes (Phinny & Chavira, 1995) or negative outcomes as it relates to internal and external problems such as depression and problematic behaviors (Caughy, 2006; Caughy et al., 2011; Davis & Stevenson, 2006). However, despite these inconsistencies, recent literature has identified racial socialization as a protective factor not only for children (Anderson et al., 2019; Hughes et al., 2006) but for adults as well, especially those who have had experiences of racial socialization when growing up (Jones & Neblett, 2019). In a search of relevant literature, Hughes and colleagues (2006) determined that the self-esteem of youth, stronger ethnic identity, and ability to cope with experiences of prejudice and

discrimination appeared to be related to experiences of racial socialization which are thought to mediate the relationship between cognitive, behavioral, and academic outcomes. More specifically, some aspects of racial socialization provide positive affirmations regarding an individual's opportunities which may enhance their goals for achievement. Additionally, racial socialization has been associated with less internalizing and externalizing symptoms, depression, anger management concerns, and physical altercations in children and adolescents (Hughes et al., 2006). However, White-Johnson and colleagues (2010) reported that more negative messages related to racial socialization versus a more diverse range, resulted in more negative outcomes. In parents, specifically mothers, those who were more open to incorporating racial socialization messages were found to communicate and be more active with their children than those who did not incorporate racial socialization messages (Frabutt et al., 2002). Similarly, Jones and Neblett (2019) found that parents with positive communication, better relationship quality, and higher coparenting relationships agreed on implementing racial socialization messages more. Several researchers have begun to implement theories and interventions that include racial socialization as a mechanism to address and assist Black families in managing racial discrimination (Anderson & Stevenson, 2019; Anderson et al., 2018; Anderson et al., 2019; Anderson et al., 2020; Smith et al., 2016). More specifically, Anderson and colleagues (2020) have recently responded to the increased public attention being given to race-related events, such as the murders of several Black American youth and adults, by creating and implementing intervention programs to assist families in healing from these traumatic events related to racial discrimination through the use of racial socialization and psychological well-being.

Family Functioning

Belsky (1981) reported that each aspect of the family dynamic impacts and is impacted by the other which impacts the overall function of the family unit. In relation to these specific family relationships, parents' *relationship quality* is defined as how satisfied each individual is with the romantic relationship at the current time. Additionally, relationship quality is measured based on both the positive and negative dimensions of the relationship (Carlson et al., 2004; Johnson et al., 1986). On the other hand, *coparenting* is described by the ability of the parents to be able to work together to raise their children while also taking into consideration both the positive and negative aspects of this relationship as well (Feinberg, 2003). *Parent-child relationships* are determined based on the level of conflict and/or positive interactions between a parent and child (Lange et al., 1998). Earlier research determined that the coparenting relationship is different from other aspects of the parents' relationship, such as relationship quality and even the parent-child relationship (Feinberg, 2003; Gable et al., 1992) however, there have also been findings that suggest that the coparenting relationship appears to be more important to mothers (Broderick et al., 2019) while fathers tend to place more importance on the romantic relationship due to changes in relationship status negatively impacting father involvement (Lavner et al., 2019).

Previous studies assessing relationship satisfaction and the coparenting relationship determined that these variables significantly impact one another, often times differently for men and women (Broderick et al., 2019; Lavner et al., 2019). However, Carlson and Hognas (2011) found that parents who displayed more supportive and/or cooperative coparenting were more likely to remain in a relationship and living together. Saini (2019) found that more positive coparenting relationships were associated with positive parent-child interactions and overall

relationships. Similarly, parent's romantic relationships and level of conflict can also impact children's internalizing and externalizing behaviors, however, family cohesion was found to moderate this relationship such that families with more cohesion appear to be better able to handle challenges that occur which likely increases the child's feelings of security within the family (Lindahl & Malik, 2011). These finding suggest that each family system impacts and is impacted by the other systems which can lead to many different outcomes as it relates to overall family functioning. Despite these differences in which aspects of the family relationships are most important when assessing family stability, each of these aspects of the family dynamic are important to the overall functioning of the family.

The Family Stress Model

Conger and colleagues (1994) created the Family Stress model (FSM) which focused on the idea that family conflict was linked to economic stressors and therefore linked to both externalizing and internalizing behaviors in adolescents. However, by 2002, this model was expanded and implemented with African American families (Conger et al., 2002). The model was expanded to include economic pressures as a result of economic strain which was associated with the emotional well-being of parents and/or caregivers and their parenting practices (Conger et al., 2002). Again in 2010 the FSM, was expanded to specifically include the impact that economic hardships and emotional wellbeing have on romantic relationships, as these economic hardships and pressures were linked to emotional distress for both individuals in a relationship. Finally, in 2017 Masarik and Conger provided additions to the FSM to include the moderating and mediating effects of risk and protective factors on child development. The most recent FSM posits associations between economic hardships, economic pressures, parent emotional wellbeing, parent relationships, parenting relationships, and child/adolescent development.

However, it also suggests that risk and protective factors can strengthen or decrease the impact of these variables on one another (see Figure 2; Masarik & Conger, 2017). The FSM model suggests that although stressors impact several areas of family functioning, risk and protective factors can impact these relationships in significant ways which can either improve or further negatively impact these relationships. Within the current study, the FSM framework can assist in understanding the ways in which experiences of racial discrimination and racial socialization may be risk and protective factors related to the impact of COVID-related stressors on family functioning.

Figure 2—Family Stress Model

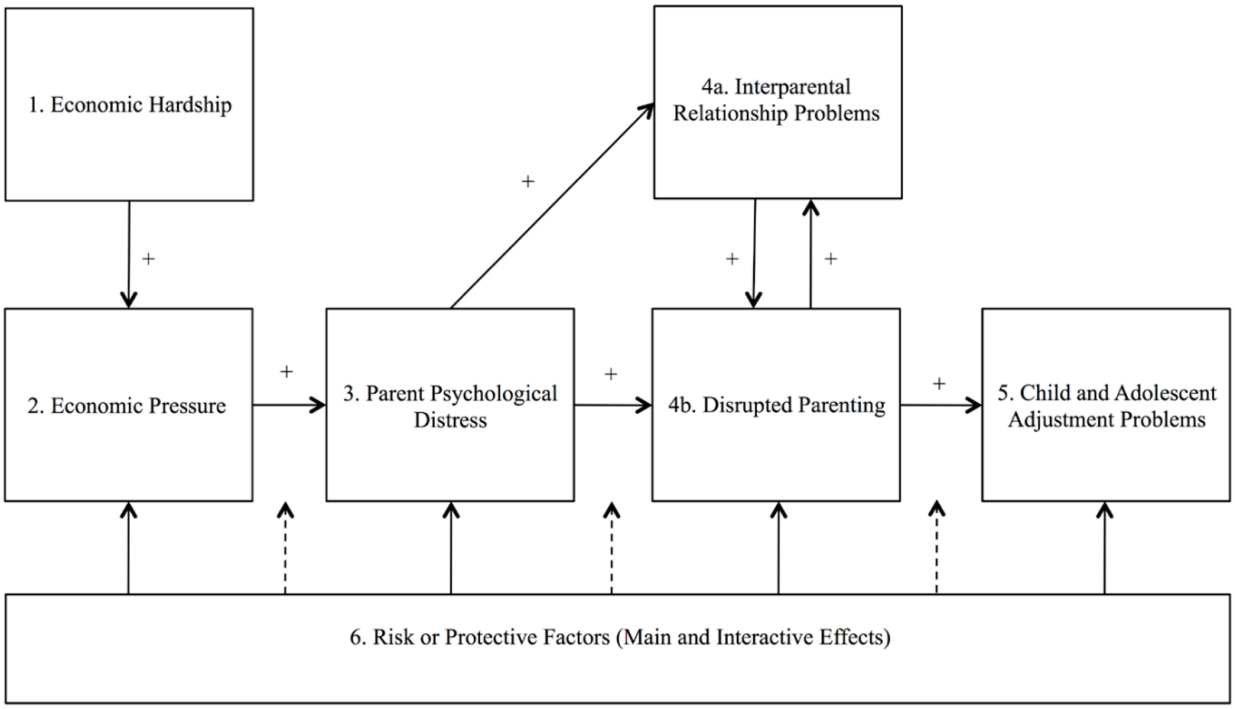
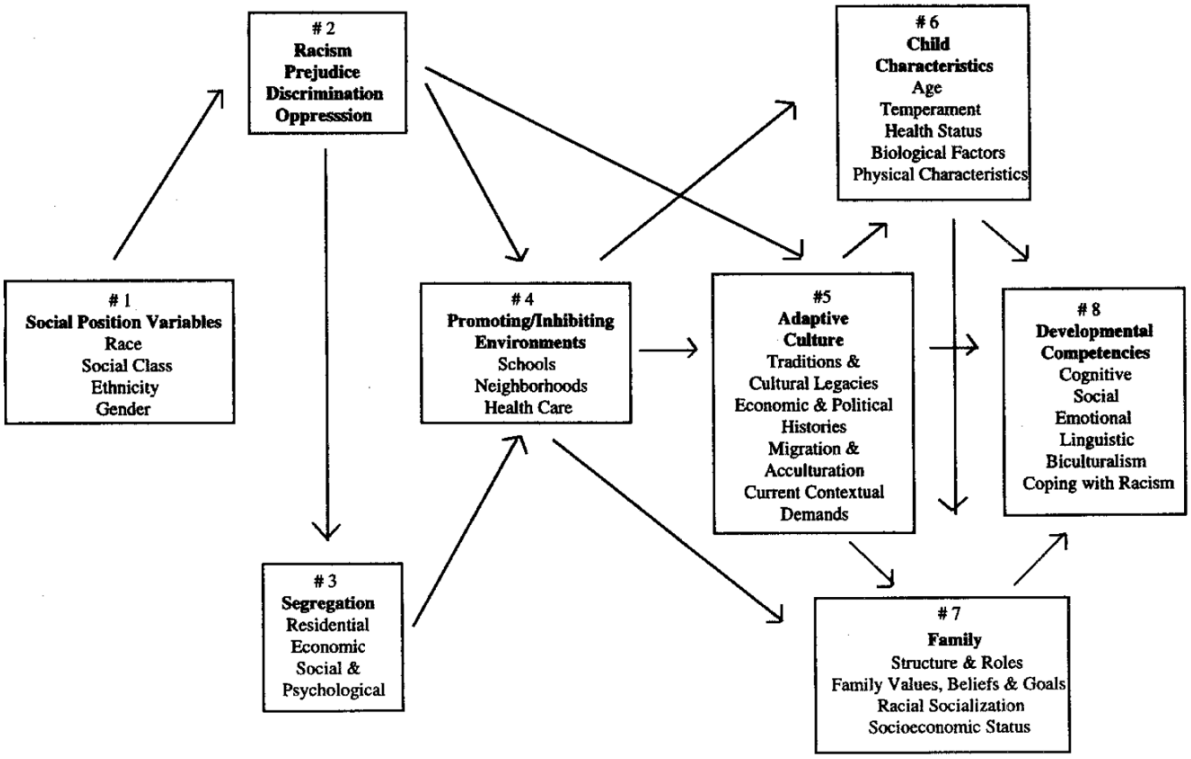


Figure 1. The Family Stress Model outlines a process in which economic stressors influence child and adolescent adjustment through various mediating pathways. Solid arrows stemming from Box 6 represent main effects whereas broken arrows represent interactive effects. Model adapted from Conger, Conger, and Martin (2010) and Conger and Conger (2002).

The Integrative Model of the study of Developmental Competencies in Minority Children

Coll and colleagues (1996) developed the integrative model of the study of developmental competencies in minority children as a way to better understand the development of minoritized children in the United States through their family and community environments. The model focuses on the constructs relevant to people of color and the unique processes related to their development as well as constructs relevant to all populations in relation to individual factors that impact developmental processes. The eight constructs within this model include 1) social position variables, 2) social mechanisms that include racism, prejudice, discrimination, and oppression, 3) segregated environments, 4) promoting/inhibiting environments, 5) experiences of adaptive culture, 6) child characteristics, 7) family structures and roles, and 8) developmental competencies (see Figure 3). More specifically, it proposes that variables related to one's social position such as race, ethnicity, social class, and gender impact experiences of racism, prejudice, discrimination, and oppression impact factors that include environment and culture which impact family roles, structure, and racial socialization, and ultimately the development of children and adolescents. The model places societal influences related to racism, discrimination, and segregation at the center which reveals the ways in which they influence immediate settings and interactions in minoritized children and families (Coll et al., 1996). Within the current study, this model can assist in understanding the ways in which societal factors and social mechanisms impact family functioning specifically within minoritized populations as well as the impact of cultural factors, such as racial socialization, on family functioning despite the above discussed issues.

Figure 3—Integrative model for the study of developmental competencies in minority children.



COVID & FAMILY FUNCTION

Daks and colleagues (2020) were the first researchers to include a family systems perspective to determine the impact of parental flexibility on family functioning during the pandemic. Research revealed that parents with higher levels of inflexibility appeared to have more significant COVID related stress which had a negative impact on family dynamics. Brown and colleagues (2020) assessed parenting stress during COVID and determined that many parents endorsed significant stress related to changes in children's learning and health as a result of COVID. Additionally, parents reported overall changes in their own mood including symptoms of depression and anxiety as well as higher stress levels and poorer sleep habits (Brown et al., 2020). Chaney (2020) indicated that according to several models of family stress,

unexpected life changes (i.e., COVID-19) call for adaptations within families to effectively deal with these stressors. However, those families that had less resources available to them and stressors in a less positive way were negatively impacted which led to poorer family functioning. Therefore, due to COVID-19 and the many related stressors, many Black families were tasked with navigating family hardships related to these changes as well as prior strains (i.e., issues occurring before COVID-19) such as lack of employment, poverty, heath disparities and racial discrimination. As a result of these many factors, it is likely that Black families have had to deal with relationship stressors within the parenting dynamics (i.e., romantic and coparenting relationships) and parent-child relationships (Chaney, 2020).

Previous epidemics can shed light on the impact that current epidemics can have on family function. In the 1980s and 1990s the HIV/AIDS epidemic disproportionately decreased the life expectancy of Blacks more frequently than their White counterparts (Aburto et al., 2020). Similarly, other pandemics over the past couple of decades such as SARS (2003), H1NI (2009), MERS (2012), Ebola (2014) and Zika (2016) have also disproportionately impacted minoritized populations as a result of economic strain, poor living conditions, and greater health risks. Although COVID-19 has been a much larger pandemic, these smaller scale events have severely impacted income distribution which suggest the same for COVID-19 in addition to the other risks mentioned above (Furceri et al., 2022).

Present Study

The Family Stress Model posits that economic pressures faced by parents are linked to their interactions with each other as well as their interactions with their children. More specifically, this model suggests that economic pressures affect parents' level of distress, which impacts parental interactions with each other, which impacts their interactions with the children,

and then impacts child/adolescent behavior (Conger et al., 1994; Conger et al., 2010; Masarik & Conger, 2017). Additionally, the most recent model from Masarik and Conger (2017) includes the impact of both risk and protective factors on these family processes (see Figure 2). Coll and colleagues' (1996) integrative model for the study of developmental competencies in minority children suggests that variables of social position such as race, ethnicity, social class, and gender impact experiences of racism, prejudice, discrimination, and oppression which impact factors that include environment and culture, which impacts family roles, structure, and racial socialization, and ultimately the development of children and adolescents. Additionally, the Sociocultural Framework for Health Services Disparities (SCF-HSD) suggests that factors including lack of insurance, lack of access to quality care or care at all, due in part to bias and stereotypes, are the cause of the health disparities in minoritized populations. In relation to these three models, previous literature has determined that experiences of racial/ethnic discrimination are likely risk factors (Barton et al., 2018; Smith et al., 2016), while racial/ethnic socialization can be a protective factor for families (Jones, 2016; Smith et al., 2016) experiencing health disparities and systemic racism. While previous studies have examined the relationship between economic hardships and family dynamics and others have examined the impact of social position variables on families, there has been a lack of research regarding the integration of economic hardship, experiences of racial/ethnic discrimination and racial/ethnic socialization on racially/ethnically diverse populations during the COVID-19 pandemic.

The purpose of the current study was to examine the impact of perceived racial discrimination on the relationship between COVID-19-related risk/stressors and family functioning as well as the impact of racial/ethnic socialization on these relationships. Experiences related to COVID-19 and racial discrimination appeared to be at an all-time high

with the climate of the nation. Research has revealed that outside stressors tend to spill over into family dynamics and impact family functioning (Barton et al., 2018). Extant literature has identified associations between COVID-related stress and family dynamics (Daks et al., 2020) as well as experiences of racial discrimination and relationship functioning (Lavner et al., 2018). Currently, there are no studies that have examined the association between COVID-risks/stressors and experiences of racial discrimination however, it is expected that there is an association as minoritized individuals are disproportionately being impacted by COVID-19 (Brown et al., 2020). The current research attempted to focus on specific systems of family functioning, including parents' romantic, coparenting, and parent-child relationships, as a way to determine whether COVID-related stressors, experiences of racial discrimination, and racial/ethnic socialization impact these systems differently.

Hypotheses:

1. Race would moderate the relationship between COVID-related stressors/risk and family function, such that when compared to White families, there would be a stronger negative association between COVID-related stressors/risks and family functioning within Black families.

   1a. When compared to White families, Black families would exhibit a stronger negative relationship between COVID-related stressors/risk and parent relationship quality.

   1b. When compared to White families, Black families would exhibit a stronger negative relationship between COVID-related stressors/risk and the coparenting relationship.

   1c. When compared to White families, Black families would exhibit a stronger negative relationship between COVID-related stressors/risk and the parent-child relationship.

2. Racial discrimination would moderate the relationship between COVID-related stressors/risk and family function, such that as experiences of racial discrimination increase within Black families, the negative relationship between COVID-related stressors and family functioning strengthens.

   2a. As experiences of racial discrimination increase within Black families, the negative relationship between COVID-related stressors and parent relationship quality strengthens.

   2b. As experiences of racial discrimination increase within Black families, the negative relationship between COVID-related stressors and the coparenting relationship strengthens.

   2c. As experiences of racial discrimination increase within Black families, the negative relationship between COVID-related stressors and the parent-child relationship strengthens.

3. Among Black families, it was expected that the moderating effect of racial discrimination discussed in hypothesis two would be conditional based on experiences of racial socialization. More specifically, as experiences of racial socialization become higher, the less of an impact racial discrimination will have on family functioning.

   3a. As experiences of racial socialization become higher, Black families would exhibit more positive parent relationship quality despite the moderating effect of perceptions of racial discrimination on COVID-related stressors and parent relationship quality.

   3b. As experiences of racial socialization become higher, Black families would exhibit a more positive coparenting relationship despite the moderating effect of perceptions of racial discrimination on COVID-related stressors and the coparenting relationship.

3c. As experiences of racial socialization become higher, Black families would exhibit a more positive parent-child relationship despite the moderating effect of perceptions of racial discrimination on COVID-related stressors and the parent-child relationship.

CHAPTER II

METHOD

Participants

Inclusion criteria. Individuals were included if they were at least 18 years old, identified as mother/mother-like caregivers, living with a romantic partner, and have at least one child between the ages of five and 17 years old. Much of the extant literature in this area has focused on adolescent children whereas less focus has been given to younger children, however, it is important to assess experiences related to children of all ages as family dynamics and experiences related to racial socialization likely change with children's ages (Hughes et al., 2006). Additionally, partners should be cohabitating, and the focal child should be living with the couple at least half the time.

Recruitment. Participants were recruited from Old Dominion University, Norfolk State University, the Hampton Roads area, state of Virginia through church communities, social media, email distribution, and the Charleston Area Medical Center (CAMC) hospital system in West Virginia. Participants from these universities were recruited using university announcements, email announcements, and the SONA Research Participation System. In addition, existing connections with Virginia church communities and leadership were used to gain recruitment with this particular population through community and email announcements. Flyers were distributed throughout the CAMC hospital system in West Virginia as well as via social media (i.e., Facebook, Instagram) and email distribution.

Data Cleaning. Analyses were conducted using SPSS version 28 and Hayes (2018) conditional PROCESS macro. A total of 418 individuals participated in the study. Participants were recruited through the SONA research participation system, ODU and NSU announcements,

email and social media distribution, and flyers distributed in the CAMC hospital system in West Virginia. Fifty-five participants were removed from the study due to lack of response to questions related to gender. Twenty-two participants identified as males and were removed from the dataset. One hundred and thirty-five participants were not cohabiting with a partner and were removed as well. Additionally, participants without children, had children outside of the required age group, or not identifying as African American/Black or Caucasian/White were also removed. Lastly, participants failing more than one attention check, or missing more than 20% of the data were removed from the study (N = 20). The remaining 104 participants met all inclusion criteria related to gender identity, race, relationship status, and child's age.

Final Sample. The final sample included 104 participants. Of the 104 participants 30.8% were African American/Black (N = 32) and 69.2% were Caucasian/White (N = 72). The mean age was 36.72 (SD = 7.90). Most of the participants were married (78.8%; N = 82), had at least some college experience (98.1%; N = 102) with approximately 43% having a graduate degree (N = 45), a household income of more than $50,000(63.6%; N = 66), three or fewer children (92.3%; N = 96) and over half of the children were elementary school aged (55.8%; N = 58). See Table 1 for sample demographic characteristics.

Table 1

Demographic Characteristics of Sample (N = 104)

Characteristic	N	%
Age		
19-24	7	6.8%
25-34	30	28.8%
35-44	52	50.1%
45-54	12	11.6%
55-61	3	3.0%
Race		
Black	32	30.8%
White	72	69.2%
Relationship Status		
In a relationship, cohabiting	22	21.2%
Married	82	78.8%
Education Level		
High school diploma	2	1.9%
Some college	32	30.8%
Undergraduate degree	25	24.0%
Graduate degree	45	43.3%
Household Income		
Less than $10,000	5	4.8%
$10,001 - $20,000	5	4.8%
$20,001 - $30,000	8	7.7%
$30,001 - $40,000	7	6.7%
$40,001 - $50,000	13	12.5%
$50,001 - $60,000	14	13.5%
$60,001 - $70,000	9	8.7%
$70,001 - $80,000	6	5.8%
$90,001 - $100,000	3	2.9%
$100,001 and above	3	2.9%
	31	29.8%
Number of Children		
1	24	23.1%
2	42	40.4%
3	30	28.8%
4	3	2.9%
5	2	1.9%
6	2	1.9%
7 or more	1	1.0%
Age of Children		
5-10	58	55.8%
11-13	18	17.3%
14 and older	28	27.0%

Measures

Demographic Questionnaire (Appendix A). A demographic questionnaire was used to gather demographic background information about the participants. Information included participants' race/ethnicity, age, education, relationship status, household income, number of children, children's ages, and gender. Additionally, parent age, household income, education level, relationship status, and number of children were included as covariates in the study. Existing literature has utilized this demographic information when examining COVID stress and risk within families as well as when studying minoritized populations in relation to parents' racial socialization practices and experiences of racial discrimination (Brown et al., 2020; Daks et al., 2020; Hughes et al., 2006; Jones & Neblett, 2019; McLanahan, 2011; Kerr et al., 2018).

Perceived Stress (Appendix B). Perceived stress was measured using the *Perceived Stress Scales* (PSS; Cohen et al., 1983). The PSS is a 14-item questionnaire that assesses global stress using a 5-point Likert-type scale of *0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, 4 = very often*. Example items include, "In the last month, how often have you felt nervous and 'stressed'?" and "In the last month, how often have you been able to control irritations in your life?" The scores on items 4, 5, 6, 7, 9, 10, and 13 were reversed and summed with the other items. Higher scores indicated higher levels of perceived stress. Cohen and colleagues (1983) indicated an internal consistency of .84, .85, and .86 using two college samples and a group of individuals attempting smoking cessation. Additionally, the PSS was correlated with social anxiety, both depressive and physical symptoms, the utilization of health services and life-event scores suggesting concurrent validity. On the other hand, the PSS was also a more significant predictor of health and health-related outcomes than life-event scores which indicates predictive

validity as well (Cohen et al., 1983). In the current study, the PSS demonstrated poor internal consistency with a Cronbach's alpha of .521.

COVID-19 Distress/Risk (Appendix C). COVID-19 distress/risk was measured using the *COVID Stress Scales* (CSS) and eight items from a study conducted by Brown and colleagues (2020; Taylor et al., 2020). The CSS is a 36-item questionnaire that uses a 5-point Likert-type scale in which higher scores indicate greater levels of stress related to COVID-19. The CSS is comprised of 5 scales: 1) danger and contamination fears, 2) fears about socioeconomic consequences, 3) xenophobia, 4) compulsive checking and reassurance seeking, and 5) traumatic stress symptoms. Example items include, "I am worried that our healthcare system won't be able to protect my loved ones" and "I had trouble concentrating because I kept thinking about the virus." Participants were asked to respond on a scale of *1 = not at all to 4 = extremely* (Taylor et al., 2020). Taylor and colleagues (2020) reported good-to-excellent internal consistencies for each subscale in both U.S. and Canadian samples ($\alpha > .80$) as well as convergent and discriminant validity. The CSS had medium-to-large significant relationships with measures of anxiety symptoms related to health and obsessive-compulsive contamination and checking symptoms before COVID (i.e., convergent validity). Additionally, when the CSS was compared to measures of current anxiety and depression, the CSS scales were more related to other measures anxiety than measures of depression (Taylor et al., 2020). Asmundson and colleagues (2020) also reported internal consistency ranges of .83-.94 for each individual subscale and .96 for the total CSS. In the current study, the CSS demonstrated good internal consistency with a Cronbach's alpha of .952.

Eight items created by Brown and colleagues (2020) was used to assess COVID-related risk factors. The items assessed whether parents or their children experienced stressors due to

COVID-19 stay-at-home orders and/or school and childcare closings. The areas assessed included: 1) parent mood or stress, 2) parent physical health, 3) parent's relationship/interactions with partner, 4) parent's relationship/interactions with child(ren), 5) child(ren)'s physical health, 6) child(ren)'s academics/learning, 7) whether parents knew someone who tested positive for COVID-19, and 8) whether parents knew someone who died from COVID-19. Participants were asked to respond with *0 = no* and *1 = yes.* Individuals with higher scores indicate higher risk factors associated with COVID-19 (Brown et al., 2020). In the current study, the COVID-related risk factors demonstrated fair internal consistency with a Cronbach's alpha of .622.

Perceptions of Racial Discrimination (Appendix D). Perceptions of racial discrimination was measured using the *Daily Life Experiences* (DLE) *Scale* of the Racism and Life Experiences Scale (Harrell, 1994; Harrell 1997). The DLE is an 18-item self-report questionnaire that measures daily hassles or microaggressions that occur as a result of race. The items included discriminatory experiences and participants were asked to specify how often these incidents have occurred to them in the past year. Responses were measured using a 6-point Likert-like scale of *0 = never, 1 = once, 2 = a few times, 3 = about once a month, 4 = a few times a month, 5 = once a week or more.* Sample items include "Being observed or followed while in public places" and "Being ignored, overlooked, or not given service (in a restaurant, store, etc.)." Harrell (1997) indicated adequate internal consistency as well as construct validity as the DLE subscale was negatively correlated with both cultural mistrust and social desirability. Additionally, the subscale was related to perceived stress as well as psychological and trauma-related symptoms suggesting evidence of criterion-related validity. Seaton and colleagues (2009) also reported internal consistencies of .92 and .93 for the DLE subscale across three time periods for adolescents and their caregivers. Recently, Lee and colleagues (2020) reported adequate

reliability (α = .89) as well as convergent validity, such that the DLE was found to be positively associated with measures of everyday discrimination, depressive and anxiety symptoms, and discrimination bother, and racial centrality, in a sample of undergraduate and graduate minority students. In the current study, the DLE scale of the Racism and Life Experiences Scale demonstrated good internal consistency with a Cronbach's alpha of .954.

Experiences of Racial Socialization (Appendix E). The *Racial Socialization Questionnaire-Parent Version* (RSQ-P) is a 26-item self-report measure that has been adapted from the *Racial Socialization Questionnaire-Teen Version* (RSQ-T) used to assess the frequency of parents giving race-related messages to their child(ren) (Lesane Brown et al., 2006). Participants were asked to respond to each item using a 3-point Likert-like rating scale, *0 = never, 1 = once or twice, 2 = more than twice* to specify how often they communicated these types of messages or engaged in these types of behaviors with their child(ren) within the past year. The RSQ-P is comprised of six subscales, *Racial Pride, Racial Barriers, Egalitarian, Self-Worth, Socialization Behaviors, and Negative Messages.* Sample items include "How often have you told [CHILD] that some people think that they are better than you because of their race" and ""How often have you told [CHILD] that they are somebody special, no matter what anybody says." A composite score was created using five of the subscales (excluding the negative messages subscale) and averaging across all message types with higher scores indicating higher levels of parental racial socialization (Ford, 2009; Jones & Neblett, 2019). Jones and Neblett (2019) found adequate reliability of the composite score of the RSQ-P (α = .79). In the current study, the RSQ-P demonstrated good internal consistency with a Cronbach's alpha of .894.

Four items created by White-Johnson and colleagues (2010) to assess how frequently mother's received racial socialization messages from parents, peers, and/or other adults was used

to measure parent's childhood racial socialization experiences in the current study. Each item was rated using a five-point Likert-like rating scale ranging from *1 = never* to *5 = very often*. Sample items include "How often did your parents or the people who raised you talk about race, racism or other groups?" In the current study, parent's childhood racial socialization experiences demonstrated good internal consistency with a Cronbach's alpha of .842.

Family Cohesion (Appendix F). The *General Functioning* (GF) subscale of the *Family Assessment Device* (FAD) was used to measure family cohesion through family functioning (Epstein et al., 1983). The subscale is comprised of 12 self-report items with 6 items measuring healthy functioning and the other 6 assessing unhealthy functioning. Each item was rated using a 4-point Likert-like rating scale with *1 = strongly agree* to *4 = strongly disagree.* Sample items include "In times of crisis we can turn to each other for support" and "Making decisions is a problem for our family." The 6 negatively worded items were reverse scored, and the total score was then divided by the number of items. Scoring ranged from 1.0 to 4.0 with 4.0 indicating the worst family functioning (Boterhoven de Haan et al., 2015; Epstein et al., 1983). Byles and colleagues (1988) reported good internal consistency (α = .86) and split-half reliability (Guttman's λ^2 = .83). The GF subscale was also correlated with other family variables including marital disharmony, which suggests evidence of construct validity (Byles et al., 1988). In the current study, the GF Scale demonstrated good internal consistency with a Cronbach's alpha of .917.

Parent Relationship Quality (Appendix G). Parent relationship quality was measured using the *Couples Satisfaction Index* (CSI-32; Funk & Rogge, 2007). The CSI-32 is a 32-item self-report questionnaire that assesses an individual's level of satisfaction with their

romantic relationship. The measure uses a 6-point Likert-like rating scale to determine relationship satisfaction with higher scores indicating higher levels of relationship satisfaction. Sample items include “How often do you wish you hadn’t gotten into this relationship” and “I still feel a strong connection with my partner.” According to Funk and Rogge (2007) the CSI-32 has great internal consistency (α = .98) as well as significant correlations ranging from 0.87 to 0.96 with other measures of relationship satisfaction such as the Dyadic Adjustment scale, Marital Status Inventory, and Marital Adjustment Test, suggesting evidence of convergent validity. In the current study, the CSI demonstrated good internal consistency with a Cronbach’s alpha of .984.

Coparenting Relationship (Appendix H). The parent’s perception of their coparenting relationship with their child(ren)’s other parent was assessed using the *Coparenting Relationship Scale* (CRS; Feinberg et al., 2012). The CRS is a 35-item self-report assessment comprised of 7 subscales (coparenting agreement, coparenting closeness, exposure of child to conflict, coparenting support, coparenting undermining, endorsement of partner’s parenting, and division of labor) used to assess four domains, 1) childrearing agreement, 2) support/undermining, 3) satisfaction with the division of labor, and 4) family management. Participants were asked to respond to each item using a 7-point Likert-like rating scale ranging from *0 = Not true of us* to *6 = Very true of us.* Sample items include statements such as “I believe my partner is a good parent” and “My partner and I have different ideas about how to raise our child.” Feinberg and colleagues (2012) reported good-to-excellent internal consistency for the overall CRS ranging from .81 to .89. Additionally, each individual subscale’s internal consistency ranged from .75 to .90. The CRS displayed a strong positive relationship with the Couple Love, Couple Efficacy, and Quality of Marriage scales and a negative association with Couple Conflict, Ineffective

Arguing, and Divorce Proneness suggesting evidence of concurrent validity (Feinberg et al., 2012). The CRS displayed good internal consistency with a Cronbach's alpha of .828 in the current study.

Parent-Child Relationship (Appendix I). The parent-child relationship was assessed using the *Parent-Child Interaction Questionnaire- Parent* (PACHIQ-P; Lange et al., 1998). The PACHIQ is a 30-item self-report measure that assesses the way in which a parent evaluates their relationship with their child. The participant was asked to respond to each item using a 5-point Likert-like rating scale ranging from *0 = Never* to *4 = Always.* Sample items include "[CHILD] and I have many conflicts that we are unable to solve" and "I accept [CHILD] as he/she is." A higher score on the PACHIQ-P suggests a more open relationship between the parent and child. Both Lange and colleagues (1998) and Vanfraussen and colleagues (2003) suggest good reliability and validity of the PACHIQ-P. Lange and colleagues' research suggests that the PACHIQ-P has good reliability and validity (Lange et al., 1998; Vanfraussen et al., 2003). More specifically, the internal consistency of the PACHIQ-P ranged from .76 to .80 for mothers and fathers with children and adolescents (Lange et al., 1998). In the current study, the PACHIQ-P demonstrated good internal consistency with a Cronbach's alpha of .802.

Procedure

The study was approved by the Institutional Review Boards at Old Dominion University and Norfolk State University before beginning participant recruitment. Interested participants were able to access the questionnaire after reviewing and agreeing to a study notification statement. Participants choosing to complete the survey signed an informed consent that included information regarding goals of the study, risks and benefits of participation in the study, and the ability related to discontinuing the survey at any time if they feel the need to.

After participants read and completed the informed consent, they were able to complete the survey. The survey consisted of a demographics questionnaire that included participants' gender, race/ethnicity, age, education, relationship status, household income, number of children, and each child's age and gender. Next, participants that identified as White completed several questionnaires including: 1) Perceived Stress Scales (Cohen et al., 1983), 2) COVID Stress Scales (Taylor et al., 2020) and COVID-19 Risk Factors (Brown et al., 2020), 3) General Functioning subscale of the Family Assessment Device (Epstein et al., 1983), 4) Couples Satisfaction Index (Funk & Rogge, 2007), 5) Coparenting Relationship Scale (Feinberg et al., 2012), and 6) Parent-Child Interaction Questionnaire- Parent (Lange et al., 1998). Participants that identified as Black or any other minoritized population completed a number of other questionnaires including: 1) Perceived Stress Scales (Cohen et al., 1983), 2) COVID Stress Scales (Taylor et al., 2020) and COVID-19 Risk Factors (Brown et al., 2020), 3) Daily Life Experiences Scale (Harrell, 1994; 1997), 4) Racial Socialization Questionnaire-Parent Version (Lesane Brown et al., 2006) and mother's own experiences of racial socialization during childhood (White-Johnson et al., 2010), 5) General Functioning subscale of the Family Assessment Device (Epstein et al., 1983), 6) Couples Satisfaction Index (Funk & Rogge, 2007), 7) Coparenting Relationship Scale (Feinberg et al., 2012), and 8) Parent-Child Interaction Questionnaire- Parent (Lange et al., 1998). Both sets of parents were asked to consider their oldest child as they answer questions related to children. Three attention check items were included throughout the survey to assess participant's level of attention as they completed the questionnaires. As there does not appear to be a rationale for specifying the order of each questionnaire, random counterbalancing was applied to each questionnaire so that the order of the questionnaire was randomized to decrease the chances of order effects. After the completion

of the survey, participants were thanked for their participation and students participating in the SONA Research Participation System received .5 credit points.

Analytic Procedures.

Power estimates. There have been many studies that have examined the relationships between some of the variables included in the current study however, to date, there have been no studies conducted that consider the relationships between all of variables included here. While this may be the case, effect sizes from several studies that have examined the relationships between distress and racial discrimination, racial socialization and racial discrimination, racial socialization and family functioning, and distress and racial socialization, range from r = .05 - .64 (Brown & Tylka, 2011; Bynum et al., 2007; Carter et al., 2017; Frabutt et al., 2002; Lee & Ahn, 2013; Smalls, 2010; Wang et al., 2020; Wilson, 2019). Taking the information provided from these previous studies, the current study aimed to detect a small-to-medium effect size that ranged from r = .17 to .24, which would have required a minimum sample size of 300 Black mother-like caregivers. However, the sample recruited was 26. Therefore, the detectable effect size for the existing sample based on an ANCOVA with fixed effects, main effects, and interactions with 7 tested predictors (CSS, RDE, RSE, CSS*RDE, CSS*RSE, RDE*RSE, CSS*RDE*RSE), a power level of 0.80, and α error probability of 0.05 via G*Power is r = 0.876 (Faul et al., 2007). See Figure 4 for a graph that includes the estimates of effect size based on the existing sample of Black participants.

While the main focus of the study was Black mother-like caregivers and families, hypothesis one used race as a moderator to compare health disparities, particularly related to COVID-related stressors. Therefore, a portion of the participants for the current study included a comparison group of White parents. A recent meta-analysis conducted by Sze and colleagues

(2020) compared the impact of COVID-19 on various ethnically minoritized group when compared to their White counterparts. This study found that Blacks were significantly more likely to be at risk for COVID-19 than White individuals (*OR* = 2.29) as well as more likely to be hospitalized (*OR* = 2.08; Sze et al., 2020). Findings from Sze and colleagues (2020) suggested a medium effect size, therefore the current study aimed to also detect a medium effect size (*r* = .35), which would require a minimum total sample size of 150 for both Black and White parents. Based on both power estimates together, the plan was to recruit a minimum of 300 Black parents and 150 White parents. However, the sample recruited for White mother-like caregivers was 78 making the total sample size 104. Therefore, the detectable effect size for the existing sample based on an ANCOVA with fixed effects, main effects, and interactions with 3 tested predictors (CSS, Race, CSS*Race), a power level of 0.80, and α error probability of 0.05 via G*Power is *r* = 0.330 (Faul et al., 2007). See Figure 5 for a graph that includes effect size estimates based on the existing total sample size.

Figure 4 – A graph representation of effect size estimates based on the actual sample size of Black participants

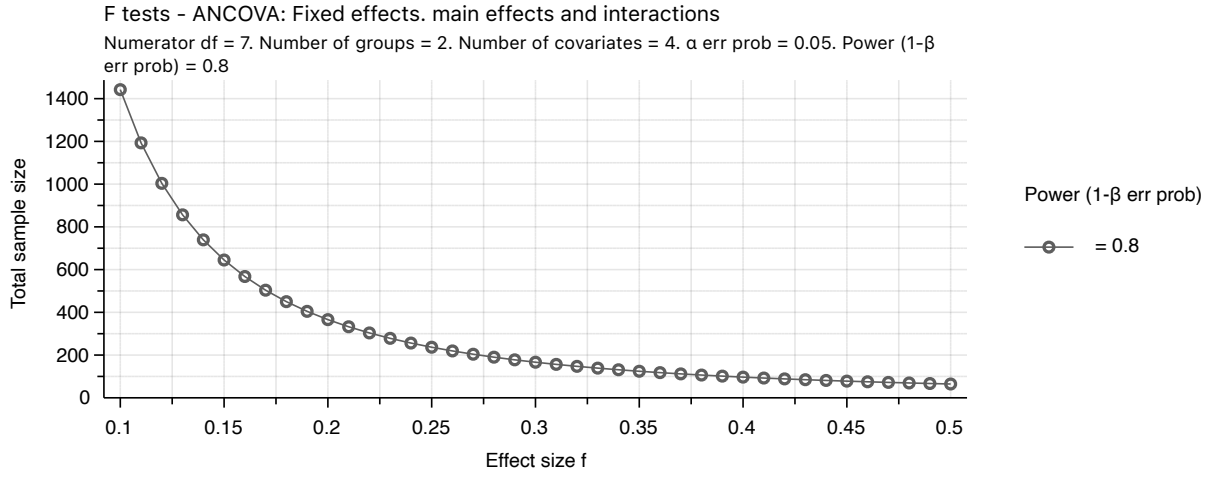
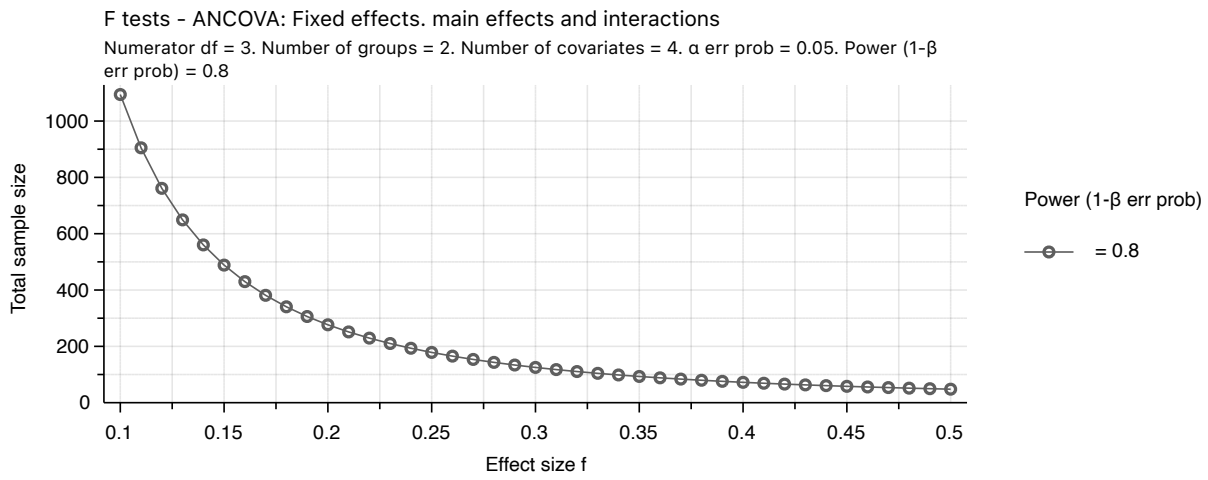


Figure 5 – A graph representation of effect size estimates based on actual total sample size



Preliminary analysis. After all data were collected, the current studied proposed the use of SPSS and Hayes conditional PROCESS macro for the analyses. Before completing the analyses, it was proposed that any participants who did not meet all inclusion criteria and/or failed more than one attention check would be removed. Additionally, all statistical assumptions for multiple linear regression would be assessed and met. Assumptions one and two require that the dependent variable be continuous and that there are at least two independent variables, which are aspects of the study design that will have already been met. Other assumptions that must be met or corrected for include independence of observations, linearity between the dependent variable and each of the independent variables, homoscedasticity of residuals, no multicollinearity, significant outliers and normal distribution of residuals.

Hypothesis testing. A series of moderation analyses using Hayes PROCESS model were conducted to test hypotheses 1 and 2 with race, COVID-related stressors, and racial discrimination as independent variables and measures of family functioning (i.e., family cohesion, parent relationship quality, coparenting relationship, and parent-child relationship) as

individual dependent variables. To test hypothesis 3, a conditional analysis using PROCESS in SPSS was used to determine whether experiences of racial socialization would moderate the relationship between COVID-related stressors, experiences of racial discrimination, and family functioning (Hayes, 2018).

Hypothesis 1, 1a, 1b, and 1c: Race as a moderator. The aim of these hypotheses was to determine whether race moderated the relationship between COVID-related stressors and family cohesion, parent relationship quality, the coparenting relationship, and the parent-child relationship. In each analysis, the predictor variable was COVID-related stressors. The dependent variables were family cohesion, parent relationship quality, coparenting relationship, and child-parent relationship. Race was the moderator. It was hypothesized that Black families would have a stronger negative association between COVID-related stressors and dynamics of family functioning than their White counterparts, such that Black parents who had more COVID-related stressors would have less positive family relationships.

Hypothesis 2, 2a, 2b, and 2c: Racial discrimination as a moderator. The aim of these hypotheses was to determine whether experiences of racial discrimination moderated the relationship between COVID-related stressors and family cohesion, parent relationship quality, the coparenting relationship, and the parent-child relationship. In each analysis, the predictor variable was COVID-related stressors. The dependent variables were family cohesion, parent relationship quality, coparenting relationship, and child-parent relationship. Racial discrimination was the moderator. It was hypothesized that in Black families, racial discrimination would moderate the association between COVID-related stressors and dynamics of family functioning, such that as experiences of racial discrimination increase the negative

relationship between COVID-related stressors and dynamics of family functioning would strengthen with increases COVID-related stressors and decreases in positive family interactions.

Hypotheses 3, 3a, 3b, and 3c: Moderated moderation. Hypothesis two predicted that racial discrimination would moderate the relationship between COVID-related stressors and the family functioning variables. However, hypothesis three expected that this relationship would be conditional based on experiences of racial socialization. It was hypothesized that Black families with higher experiences of racial socialization would exhibit more positive family functioning despite the moderating effect of perceptions of racial discrimination on COVID-related stressors and family functioning variables. COVID-related stressors were the predictor variable while racial discrimination and racial socialization were the moderating variables and each aspect of the family interactions would be the dependent variables. A conditional analysis within PROCESS was used to determine whether racial socialization would moderate the relationship between racial discrimination, COVID-related stressors, and dynamics of family functioning.

CHAPTER III

RESULTS

Preliminary Analyses

Before conducting the analyses, the data were appropriately labeled and scaled. Items requiring reverse coding were recoded and accurately summed to create total scores. Internal consistency was examined based on alpha coefficients for all measures. Each variable was assessed for normality and univariate outliers using skewness, kurtosis, histograms, q-q plots, and box plots. Histograms, q-q plots, skewness and kurtosis revealed no abnormalities; therefore, each variable appeared to have a normal distribution. Univariate outliers were examined using boxplots which revealed four outliers on the CSI, two on the CRS, two on the PCI, and two on the RSQ-P. However, each of these outliers were mild, meaning that they were more extreme than +/- Q1 and Q3 times 1.5 but not more than 3, which would be considered an extreme outlier when examining the boxplot, therefore they were not removed from the dataset. Multicollinearity was assessed using by examining the variable inflation factor (VIF). All VIFs were 1.219. Linearity and heteroscedasticity were assessed via scatterplot and p-p plots. No concerns were found for the study variables.

Participants were excluded from analyses using pairwise deletion due to the small sample size. More specifically, participants missing entire scales were excluded from analyzes utilizing those variables. In reviewing the data after excluding those missing entire scales, only 14 participants were missing scales no more than 2 items per scale; therefore, person mean imputation was utilized. This required the mean of the scale to be calculated and this mean score was utilized as the score for the missing item.

Multivariate outliers were assessed using Cook's D test which examines discrepancy and leverage. Four cases exceeded these critical values and were identified as multivariate outliers. As Cook's D test is very sensitive in nature, the graphical interpretations of these variables were also examined and did not reveal extreme variance. While each of these cases were higher than the mean of these variables, this likely indicates the varying levels of family cohesion, couple satisfaction, or parent-child relationship within participants, which is an important factor within the study. Descriptive statistics for all study variables are presented in Table 2. Additionally, correlations between study variables and covariates were examined before proposed analyses and are presented in Table 3.

Table 2

Descriptive Statistics of Study Measures for Black and White Mothers/Mother-Like Caregivers

	Black Mother-like Caregivers		White Mother-like Caregivers	
Continuous Variables	*N*	*M (SD)*	*N*	M (SD)
COVID-related Stressors	26	49.50 (28.12)	70	40.35 (21.71)
Family Cohesion	31	20.52 (6.39)	72	19.32 (5.94)
Parent Relationship Quality	27	111.51 (38.35)	68	118.31 (31.02)
Coparenting Relationship	28	120.09 (25.43)	67	119.87 (18.95)
Parent-Child Relationship	29	93.23 (10.65)	68	93.96 (9.19)
Racial Discrimination	30	22.03 (15.47)	-	-
Racial Socialization	29	30.63 (6.78)	-	-

Table 3

Intercorrelations of Study Variables

		1	2	3	4	5	6	7	8	9	10
1.	COVID Stress Scales	--									
2.	Family Functioning	0.16	--								
3.	Parent Relationship Quality	0.03	-0.56**	--							
4.	Coparenting Relationship	0.08	-0.51**	0.66**	--						
5.	Parent-Child Relationship	-0.17	-0.49**	0.25*	0.35**	--					
6.	Racial Discrimination	0.43*	0.28	-0.04	0.16	-0.38*	--				
7.	Racial Socialization	0.03	-0.01	-0.04	0.09	-0.11	-0.15	--			
8.	Parent Age	-0.16	0.06	-0.10	-0.24*	0.06	-0.36	-0.14	--		
9.	Parent Education Level	0.06	0.08	-0.01	-0.08	-0.15	-0.08	0.33	0.41**	--	
10.	Household Income	-0.11	-0.03	0.02	-0.05	0.09	-0.11	0.14	0.48**	0.49**	--
11.	Number of Children	-0.16	-0.05	-0.10	-0.22*	-0.03	-0.31	-0.10	0.23*	0.0	0.09

Note. $N = 104$; Bivariate correlations were conducted for associations between two continuous variables. * $p < .05$, ** $p < .01$.

Statistical Analyses

Moderation analyses using Hayes PROCESS model were conducted to test hypothesis 1-1c and 2-2c with race, COVID-related stressors, and racial discrimination as independent variables and measures of family functioning (i.e., family cohesion, parent relationship quality, coparenting relationship, and parent-child relationship) as individual dependent variables. To test hypothesis 3, a conditional analysis using PROCESS in SPSS was used to determine whether experiences of racial socialization will moderate the relationship between COVID-related stressors, experiences of racial discrimination, and family functioning (Hayes, 2018).

Multivariate outliers made minimal impact on effect sizes and were therefore retained for all analyses. Statistical assumptions for regression-based analyses were completed.

Hypothesis 1, 1a, 1b, 1c: Race as a Moderator. It was hypothesized that the relationship between COVID-related stressors and different areas of family functioning (i.e., family cohesion, parent relationship quality, coparenting relationship, and parent-child relationship) would be moderated by race, such that when compared to White families, Black families would have a stronger negative association between COVID-related stressors and areas of family functioning (see Table 4 for results).

The first moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, family cohesion as the dependent variable and race as the moderator. A significant main effect was found for COVID-related stressors and family cohesion, $\beta = 0.674$, $t\ (88) = 3.015$, $p < 0.001$ and a non-significant main effect was found for race, $\beta = -0.042$, $t\ (88) = -0.730$, $p = 0.468$. However, there was a significant interaction between COVID-related stressors and race, $\beta = -0.148$, $t\ (88) = -2.699$, $p = 0.008$, for Black families, $\beta = 0.526$, $t\ (88) = 2.975$, $p = 0.004$, but not for White families, $\beta = -0.007$, $t\ (88) = -0.521$, $p = 0.603$. These findings indicate that race did moderate the relationship between COVID-related stressors and family cohesion. As Black families experienced more COVID stress, the higher their level of family cohesion increased, in contrast in White families there was no association between COVID stress and family cohesion (see Figure 6). Therefore, hypothesis 1 was partially supported.

The second moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, parent relationship quality as the dependent variable, and race as the moderator. The main effect for

COVID-related stressors, β = -0.245, t (86) = -0.942, p = 0.349, and race, β = 0.061, t (86) = 0.775, p = 0.441, were non-significant. The interaction between COVID-related stressors and race, β = 0.076, t (86) = 1.280, p = 0.204, was also non-significant. These findings indicated that race did not moderate the relationship between COVID-related stressors and parent relationship quality. Hypothesis 1a was not supported.

The third moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, coparenting relationship as the dependent variable, and race as the moderator. The main effect for COVID-related stressors, β = -0.051, t (85) = -0.206, p = 0.838, and race, β = 0.020, t (85) = 0.252, p = 0.801, were non-significant. The interaction between COVID-related stressors and race, β = 0.024, t (85) = 0.419, p = 0.677, was also non-significant. These findings indicated that race did not moderate the relationship between COVID-related stressors and the coparenting relationship. Hypothesis 1b was not supported.

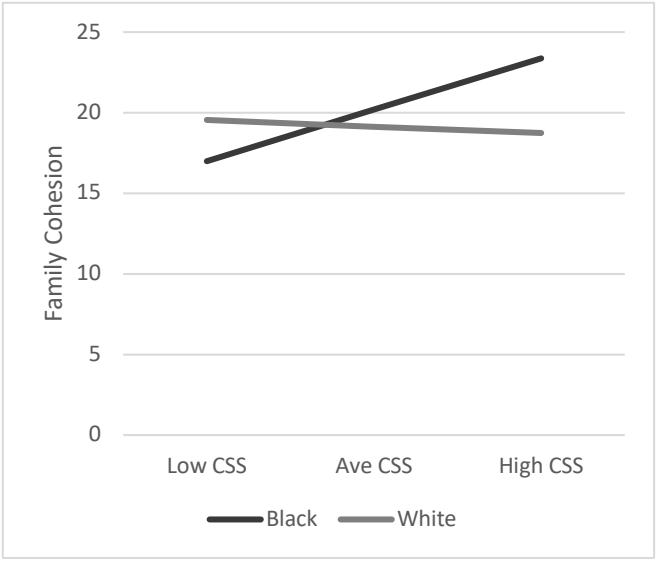
The fourth moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, the parent-child relationship as the dependent variable, and race as the moderator. The main effect for COVID-related stressors, β = -0.490, t (86) = -2.242, p = 0.028 was significant; however, the main effect for race, β = -0.013, t (86) = -0.187, p = 0.852 was non-significant. Additionally, the interaction between COVID-related stressors and race was non-significant, β = 0.098, t (86) = 1.690, p = 0.095. Lastly, education level was a significant predictor of parent-child relationship, β = -0.251, t (86) = -2.041, p = 0.044. These findings indicated that race did not moderate the relationship between COVID-related stressors and the parent-child relationship. Hypothesis 1c was not supported.

Table 4

Summary of Race Predicting Family Functioning

	Family Cohesion $N = 96$				Relationship Quality $N = 94$				Coparenting Relationship $N = 93$				Parent-Child Relationship $N = 94$			
Variable	β	*SE* β	95% CI		β	*SE* β	95% CI		β	*SE* β	95% CI		β	*SE* β	95% CI	
Age	0.14	0.14	-0.14	0.43	-0.12	0.14	-0.40	0.15	-0.24	0.14	-0.51	0.03	0.08	0.10	-0.12	0.29
Education	0.02	0.15	-0.28	0.32	-0.01	0.16	-0.33	0.31	-0.02	0.17	-0.35	0.31	-0.25*	0.12	-0.50	-0.01
Income	-0.01	0.04	-0.09	0.07	0.02	0.04	-0.06	0.10	0.03	0.04	-0.06	0.12	0.04	0.04	-0.03	0.12
# Children	-0.00	0.10	-0.20	0.19	-0.10	0.11	-0.33	0.13	-0.14	0.13	-0.40	0.12	-0.13	0.14	-0.41	0.15
CSS	0.67**	0.22	0.23	1.12	-0.24	0.26	-0.76	0.27	-0.05	0.25	-0.55	0.44	-0.49	0.22	-0.92	-0.06
Race	-0.04	0.06	-0.16	0.07	0.06	0.08	-0.10	0.22	0.02	0.08	-0.14	0.18	-0.01	0.07	-0.15	0.13
CSS x Race	-0.14*	0.05	-0.26	-0.04	0.07	0.06	-0.04	0.19	0.02	0.06	-0.09	0.14	0.09	0.06	-0.02	0.21

Figure 6— Graph of the interaction between COVID stressors and Race on Family Cohesion



Hypothesis 2, 2a, 2b, 2c: Perceived Racial Discrimination as a Moderator. It was hypothesized that the relationship between COVID-related stressors and different areas of family functioning (i.e., family cohesion, parent relationship quality, coparenting relationship, and parent-child relationship) would be moderated by experiences of perceived racial discrimination within Black families. This suggests that families experiencing more racial discrimination would have stronger negative relationships between COVID-related stressors and areas of family functioning than families experiencing less racial discrimination (see Table 5 for results).

The first moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, family cohesion as the dependent variable and racial discrimination as the moderator. A non-significant main effect was found for COVID-related stressors, $\beta = 0.445$, $t\ (18) = 1.518$, $p = 0.147$ and racial discrimination, $\beta = 0.267$, $t\ (18) = 0.746$, $p = 0.465$. Additionally, the interaction between

COVID-related stressors and racial discrimination was non-significant, $\beta = 0.184$, t (18) = 0.540, $p = 0.596$. These findings indicated that racial discrimination did not moderate the relationship between COVID-related stressors and family cohesion. Therefore, hypothesis 2 was not supported.

The second moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, parent relationship quality as the dependent variable and racial discrimination as the moderator. A non-significant main effect was found for COVID-related stressors, $\beta = -0.156$, t (18) = -0.377, $p = 0.711$, and racial discrimination, $\beta = 0.020$, t (18) = 0.044, $p = 0.966$. Additionally, the interaction between COVID-related stressors and racial discrimination was non-significant, $\beta = 0.160$, t (18) = 0.410, $p = 0.687$. These findings indicated that racial discrimination did not moderate the relationship between COVID-related stressors and parent relationship quality. Therefore, hypothesis 2a was not supported.

The third moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, coparenting relationship as the dependent variable, and racial discrimination as the moderator. A non-significant main effect was found for COVID-related stressors, $\beta = -0.129$, t (18) = -0.430, $p = 0.672$, and racial discrimination, $\beta = 0.193$, t (18) = 0.451, $p = 0.657$. Additionally, the interaction between COVID-related stressors and racial discrimination was non-significant, $\beta = 0.274$, t (18) = 0.918 $p = 0.371$. These findings indicated that racial discrimination did not moderate the relationship between COVID-related stressors and parent relationship quality. Therefore, hypothesis 2b was not supported.

The fourth moderation analysis included COVID-related stressors as the predictor, parent-child relationship as the dependent variable and racial discrimination as the moderator. A non-significant main effect was found for COVID-related stressors, β = -0.547 t (18) = -1.734, p = 0.100, and racial discrimination, β = -0.069, t (18) = -0.192, p = 0.850. Additionally, the interaction between COVID-related stressors and racial discrimination was non-significant, β = 0.257, t (18) = 0.919, p = 0.370. These findings indicated that racial discrimination did not moderate the relationship between COVID-related stressors and parent-child relationship. Therefore, hypothesis 2c was not supported.

Table 5

Summary of Racial Discrimination Predicting Family Functioning (N = 26)

	Family Cohesion				Relationship Quality				Coparenting Relationship				Parent-Child Relationship			
Variable	*β*	*SE β*	95% CI		*β*	*SE β*	95% CI		*β*	*SE β*	95% CI		*β*	*SE β*	95% CI	
Age	0.02	0.25	-0.50	0.55	0.10	0.37	-0.67	0.88	0.01	0.39	-0.81	0.85	0.34	0.32	-0.33	1.03
Education	0.34	0.40	-0.50	1.20	-0.10	0.54	-1.24	1.02	-0.03	0.51	-1.10	1.03	0.12	0.52	-0.96	1.21
Income	0.04	0.11	-0.18	0.28	-0.10	0.14	-0.41	0.19	-0.08	0.17	-0.44	0.28	-0.05	0.14	-0.35	0.24
# Children	0.03	0.29	-0.57	0.64	-0.09	0.30	-0.73	0.53	-0.28	0.24	-0.78	0.21	-0.45	0.38	-1.25	0.35
CSS	0.44	0.29	-0.17	1.06	-0.15	0.42	-1.03	0.72	-0.12	0.30	-0.76	0.50	-0.54	0.32	-1.21	0.12
RDE	0.26	0.36	-0.48	1.02	0.02	0.46	-0.95	0.99	0.19	0.43	-0.71	1.09	-0.06	0.36	-0.82	0.68
CSS x RDE	0.18	0.34	-0.53	0.90	0.16	0.39	-0.66	0.98	0.27	0.30	-0.35	0.90	0.25	0.28	-0.33	1.03

Hypothesis 3, 3a, 3b, 3c: Moderated Moderation. It was expected that the moderating effect of racial discrimination discussed in hypothesis two will be conditional based on experiences of racial socialization. More specifically, it is hypothesized that as experiences of racial socialization become higher, the less of an impact racial discrimination will have on different areas of family functioning (i.e., family cohesion, parent relationship quality, coparenting relationship, and parent-child relationship). To examine this moderated moderation, Hayes (2018) PROCESS macro model = 3 specifications were used (see Table 6 for results).

The first moderated moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, family cohesion as the dependent variable, racial discrimination, and racial socialization as the moderators. Each main effect was non-significant, including COVID-related stressors, β = -0.099, t (14) = -0.113, p = 0.911, racial discrimination, β = 0.437, t (14) = 0.598, p = 0.560, and racial socialization, β = -1.06, t (14) = -1.954, p = 0.071. All two-way interactions were non-significant including COVID-related stressors and racial discrimination, β = 0.091, t (14) = 0.166, p = 0.871, COVID-related stressors and racial socialization, β = 0.933, t (14) = 1.030, p = 0.321, and racial discrimination and racial socialization, β = -0.802, t (14) = -0.816, p = 0.428. Additionally, the three-way interaction with COVID-related stressors, racial discrimination, and racial socialization, was non-significant, β = 0.790, t (14) = 1.111, p = 0.285. These findings suggest that the moderating effect of racial discrimination experiences on COVID-related stressors and family cohesion is not conditional on racial socialization experiences. Therefore, hypothesis 3 was not supported.

The second moderated moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the

covariates, parent relationship quality as the dependent variable and racial discrimination and racial socialization as the moderators. Each main effect was non-significant, including COVID-related stressors, $\beta = 0.241$ t (14) = 0.257, $p = 0.801$, racial discrimination, $\beta = 0.155$, t (14) = 0.188, $p = 0.854$, and racial socialization, $\beta = 1.303$, t (14) = 1.374, $p = 0.191$. Additionally, all two-way interactions were non-significant including COVID-related stressors and racial discrimination, $\beta = 0.441$, t (14) = 0.714, $p = 0.487$, COVID-related stressors and racial socialization, $\beta = -0.581$, t (14) = -0.570, $p = 0.578$, and racial discrimination and racial socialization, $\beta = 0.731$, t (14) = 0.620, $p = 0.545$. Lastly, the three-way interaction with COVID-related stressors, racial discrimination, and racial socialization, was non-significant, $\beta = -0.769$, t (14) = -0.811, $p = 0.431$. These findings suggest that the moderating effect of racial discrimination experiences on COVID-related stressors and parent relationship quality is not conditional on racial socialization experiences. Therefore, hypothesis 3a was not supported.

The third moderated moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, coparenting relationship as the dependent variable and racial discrimination and racial socialization as the moderators. Each main effect for COVID-related stressors, $\beta = 0.319$, t (14) = 0.588, $p = 0.566$, racial discrimination, $\beta = 0.322$, t (14) = 0.561, $p = 0.584$, and racial socialization, $\beta = 1.654$, t (14) = 1.832, $p = 0.088$, was non-significant. The two-way interactions were non-significant including COVID-related stressors and racial discrimination, $\beta = 0.731$, t (14) = 1.531, $p = 0.148$, COVID-related stressors and racial socialization, $\beta = -0.887$, t (22) = -1.682, $p = 0.115$, and racial discrimination and racial socialization, $\beta = 0.723$, t (14) = 1.092, $p = 0.293$. Lastly, the three-way interaction with COVID-related stressors, racial discrimination, and racial socialization, was non-significant, $\beta = -0.732$, t (14) = -1.064, $p = 0.305$. These findings

suggest that the moderating effect of racial discrimination experiences on COVID-related stressors and parent relationship quality is not conditional on racial socialization experiences. Therefore, hypothesis 3b was not supported.

The fourth moderated moderation analysis included COVID-related stressors as the predictor, parent age, household income, education level and number of children as the covariates, parent-child relationship as the dependent variable and racial discrimination and racial socialization as the moderators. The main effect for COVID-related stressors, $\beta = -0.147$, t (14) = -0.226, $p = 0.825$, racial discrimination, $\beta = -0.265$, t (14) = -0.455, $p = 0.656$, and racial socialization, $\beta = 0.680$, t (14) = 0.943, $p = 0.362$, were all non-significant. The two-way interaction was also non-significant including COVID-related stressors and racial discrimination, $\beta = 0.354$, t (14) = 0.798, $p = 0.438$, COVID-related stressors and racial socialization, $\beta = -0.814$, t (14) = -1.285, $p = 0.220$, and racial discrimination and racial socialization, $\beta = 0.523$, t (14) = 0.720, $p = 0.483$. Lastly, the three-way interaction with COVID-related stressors, racial discrimination, and racial socialization was non-significant, $\beta = -0.417$, t (14) = -0.774, $p = 0.452$. These findings suggest that the moderating effect of racial discrimination experiences on COVID-related stressors and the parent-child relationship is not conditional on racial socialization experiences. Therefore, hypothesis 3c was not supported.

Table 6

Summary of Racial Discrimination and Socialization Predicting Family Functioning (N = 26)

	Family Cohesion				Relationship Quality				Coparenting Relationship				Parent-Child Relationship			
Variable	*β*	*SE β*	95% CI		*β*	*SE β*	95% CI		*β*	*SE β*	95% CI		*β*	*SE β*	95% CI	
Age	0.08	0.34	-0.66	0.82	0.08	0.44	-0.87	1.05	0.24	0.41	-0.63	1.12	0.41	0.43	-0.51	1.34
Education	0.64	0.61	-0.68	1.95	-0.19	0.82	-1.96	1.58	-0.36	0.54	-1.51	0.79	-0.26	0.63	-1.62	1.10
Income	0.04	0.15	-0.29	0.37	-0.12	0.16	-0.49	0.23	-0.12	0.15	-0.45	0.20	-0.47	0.17	-0.41	0.32
# Children	-0.36	0.53	-1.50	0.78	0.18	0.49	-0.88	1.24	0.00	0.33	-0.72	0.73	-0.17	0.56	-1.38	1.02
CSS	-0.09	0.87	-1.96	1.77	0.24	0.94	-1.77	2.25	0.31	0.54	-0.84	1.48	-0.14	0.64	-1.53	1.24
RDE	0.43	0.73	-1.13	2.00	0.15	0.82	-1.62	1.93	0.32	0.57	-0.91	1.55	-0.26	0.58	-1.51	0.98
RSE	-1.05	0.54	-2.21	0.10	1.30	0.94	-0.73	3.33	1.65	0.90	-0.28	3.59	0.68	0.72	-0.86	2.22
CSS x RDE	0.09	0.54	-2.21	0.10	0.44	0.61	-0.88	1.76	0.73	0.47	-0.29	1.75	0.35	0.44	-0.59	1.30
CSS x RSE	0.93	0.90	-1.00	2.87	-0.58	1.02	-2.77	1.60	-0.88	0.52	-2.01	0.24	-0.81	0.63	-2.17	0.54
RDE x RSE	-0.80	0.98	-2.90	1.30	0.73	1.17	-1.79	3.26	0.72	0.66	-0.69	2.14	0.52	0.72	-1.03	2.07
CSS x RDE x RSE	0.79	0.71	-0.73	2.31	-0.76	0.94	-2.80	1.26	-0.73	0.68	-2.20	0.74	-0.41	0.53	-1.57	0.73

CHAPTER IV

DISCUSSION

The goal of this study was to explore the impact perceived racial discrimination and racial socialization experiences may have on several areas of family functioning while navigating the stressors related to the COVID-19 pandemic. The first set of hypotheses predicted that race would moderate the relationship between COVID-related stressors and specific areas of family functioning including family cohesion, parent relationship quality, the coparenting relationship, and the parent-child relationship. More specifically, the hypotheses stated that Black families would have a stronger negative association between COVID-related stressors and each dynamic of family functioning than their White counterparts, such that Black parents who have more COVID-related stressors will have less positive family relationships. Results did not show significant evidence of a moderating effect of race on COVID-related stressors and parent relationship quality, the coparenting relationship, or the parent-child relationship. However, race did moderate the relationship between COVID-related stressors and family cohesion for Black families. Black families that experienced higher levels of COVID-related stress in turn experienced higher levels of family cohesion while their White counterparts saw no association between COVID-related stress and family cohesion. This finding was counterintuitive to what was predicted because as Black families reported more stressors, they also indicated stronger cohesiveness.

The next set of hypothesizes predicted that within Black families, experiences of racial discrimination would moderate the relationship between COVID-related stressors and the four areas of family functioning: family cohesion, parent relationship quality, the coparenting relationship, and the parent-child relationship, such that as experiences of racial discrimination

increase the negative relationship between COVID-related stressors and dynamics of family functioning will strengthen, with increases in COVID-related stressors and decreases in positive family interactions. The results did not show significant evidence of a moderating effect of racial discrimination on COVID-stressors and family dynamics within Black families. The standardized beta effect sizes for family cohesion, parent relationship quality, the coparenting relationship and the parent-child relationship were $\beta = 0.18$, 0.16, 0.27, and 0.26, respectively. These effect sizes suggest that further investigation may be warranted to examine the association between these variables with a larger sample size, as the current study has low power due to the current study's small sample size ($N = 26$).

In the last set of hypotheses, it was predicted that the moderating effect of experiences of racial discrimination on COVID-related stressors and family functioning would be moderated by experiences of racial socialization within Black families. More specifically, it was hypothesized that Black families with more experiences of racial socialization would exhibit more positive family functioning despite the moderating effect of experiences of racial discrimination on COVID-related stressors and dynamics of family functioning. Results also did not reveal significant evidence of the moderating effect of racial socialization on the moderating effect of racial discrimination on COVID-related stressors and the four areas of family functioning. Standardized beta effect sizes for family cohesion, parent relationship quality, the coparenting relationship, and the parent-child relationship were as follows, $\beta = 0.79$, -0.77, 0.73, and -0.42, suggesting the need for further investigation regarding the associations of the included variables with a larger sample size.

Race as a Moderator.

Studies have looked at the impact of race on increased risk for COVID-19 and have found that minoritized populations, specifically Black Americans, are at higher risk for contracting COVID-19 and are more negatively impacted by COVID-19 due to several inequities (Haynes et al., 2020; Miconi et al., 2020). Additional research has determined that Black Americans have experienced more COVID-19 related stressors than their White counterparts, especially when there were pre-pandemic stressors related to chronic stress, racial discrimination, and financial strain (Adesogan et al., 2022). However, studies have not examined the moderating effect of race on COVID-19 stressors on the different areas of family functioning. Therefore, this study aimed to do so by hypothesizing that Black families with more COVID-19 related stressors would have lower levels of family functioning than their White counterparts. This hypothesis was partially supported only for the family dynamic of family cohesion. The study analyses found that while race moderates the relationship between COVID-19 stressors and family cohesion, Black families with higher levels of COVID-related stressors had higher levels of family cohesion. Several previous studies have determined that despite adversity, when families have higher levels of cohesion and support, they are better able to handle the difficulties that arise (Hostinar & Miller, 2019; Lowrey, 2022; Noltemeyer & Bush, 2013; Vandsburger & Biggerstaff, 2004). Lowrey (2022) discovered that families experiencing adversity before the COVID-19 pandemic were still able to find positives associated with the experiences which included family togetherness and closeness. Additionally, it was found that adversities, such as poverty, promoted psychological resiliency in families through areas such as family support which decreased the impact of stressors such as financial pressures on family functioning, which may be similar to what was occurring in the current study (Hostinar & Miller,

2019; Vandsburger & Biggerstaff, 2004). Noltemeyer and Bush's (2013) results revealed that family dynamics such as parental communication, relationship quality and stability, parental interactions, and family cohesion, served as protective factors that promoted resilience. Rutter (2012) found that some protective factors may actually enhance outcomes when risk or adversity occurs which is referred to as "steeling effects"; however there has not been substantial research regarding this topic. These findings suggest that adversity caused by COVID-19 may have strengthened perceptions of family togetherness within Black families from the current sample; however, additional research should be done on this topic with a larger sample size with variability in education level.

The study analyses did not show significant evidence for the moderating effect of race on COVID-related stressors and additional family dynamics of romantic relationship quality, the coparenting relationship, and the parent-child relationship. This likely means that for this specific small sample of Black mother or mother-like caregivers, family cohesion may have been the most important aspect of the family dynamic. However, extant research has examined the impact of COVID-related stressors on the different areas of family functioning (Adesogan et al., 2022; Gambin et al., 2020; He et al., 2021; Hussong et al., 2022). A study examining COVID-related stressors in Black Americans living in the rural south found that having positive perceptions of their relationship quality was an important factor for dealing with stress (Adesogan et al., 2022). He and colleagues (2021) found that despite stressors associated with COVID-19, vulnerable families who reported more positive attitudes also reported a more supportive coparenting relationship. Another study found that adolescents who had a parental figure providing medical care for individuals with COVID-19, family experiences and relationships were stronger despite the stressors related to the parental figures job demands (Hussong et al., 2022). Additional

literature found that positive parent-child interactions were increased due to increases in the amount of time families were able to spend together as well as the ability to increase emotional closeness (Gambin et al., 2020). According to the current literature, it is likely that perceived strong family relations and support do impact the effect of stressors; however, due to the small sample size, it is important that additional research be conducted with a larger sample size.

Racial Discrimination as a Moderator in Black Families.

Racial discrimination is a known chronic stressor for Black individuals and Black families (Anderson & Stevenson, 2019; Anderson et al., 2019; Kerr et al., 2018; Lavner et al., 2018). More recent studies have delved into the association of COVID-19 and racial discrimination and found that minoritized populations, especially those within the Black community, were being more significantly impacted by COVID-19 as a result of health disparities and systemic racism, as well as the continued stressors of everyday racial discrimination (Daks et al., 2020; Laurencin & McClinton, 2020; Miconi et al., 2020; Watson et al., 2020). At the time of this study, no research had been conducted to examine the moderating effect of experiences of racial discrimination on COVID-related stressors and family functioning within Black families. Therefore, the current study aimed to do so by hypothesizing that families experiencing racial discrimination would have a stronger negative relationship between COVID-related stressors and family dynamics than those who experienced less or no racial discrimination. Analyses did not detect a significant moderating effect of racial discrimination on dynamics of family functioning. However, when examining the results, although the study lacked power, likely due to the limited sample size, effect sizes (0.18, 0.16, 0.27, 0.26) were found to be similar to effect sizes initially suggested (.14 -.24). This suggests that there is a possibility that significant associations between these factors were unable to be detected due to

the lack of power of the current study. Additionally, previous research has already revealed that general stressors, including racial discrimination, can cause spillover effects and impact family relationships, especially in Black families, suggesting relationships between these variables (Buck & Neff, 2012; Randall & Bodenmann, 2008). On the other hand, similar to significant findings in hypothesis one, it could be possible that these areas of family functioning such as family cohesion are types of social support that buffer the impact of COVID-related and racial discrimination. Areas of family functioning may instead significantly impact the relationship between COVID-stressors and racial discrimination as found in extant literature. A recent study examining the impact of racial discrimination during the COVID-19 pandemic on mental health in Black individuals found that partner support buffered the association between racial discrimination and mental health outcomes (Gimarc, 2022). Another study found that teens with more experiences of racism who also had higher levels of adult support were better able to adapt to changes related to COVID-19, suggesting that support can moderate the relationship between stressors such as experienced racism and outcomes (Butler-Barnes, 2022).

Moderated Moderation.

Existing literature describes racial socialization as a protective factor for Black families in many areas but especially when experiencing racial discrimination (Anderson et al., 2019; Jones & Neblett, 2019); however, currently, there have not been studies examining the protective nature of racial socialization for families navigating COVID-19 stressors and experiences of racial socialization. Therefore, the current study set out to determine if racial socialization moderated the moderating relationship of racial discrimination on COVID-related stressors and dynamics of family functioning. Analyses for this set of hypotheses did not reveal significant evidence for the moderating effect of racial socialization on the moderation of racial

discrimination between COVID-related stressors and family dynamics. As mentioned regarding previous hypotheses, it is possible that the small sample size impacted the ability to detect the true effects as the estimated study effect sizes ranged from 0.17 to 0.24 and the actual effect sizes for these hypotheses ranged from -0.42 to 0.79. Moreover, it is possible that social support through the family dynamics could also be defined as protective factors for families dealing with stressors related to COVID-19 and racial discrimination as seen in hypothesis one as well as findings from additional studies. Recent studies report an increase in families spending time addressing race-related issues as well as teaching about racial identity and culture through racial socialization during the pandemic (Anderson et al., 2021; Galán et al., 2021). Anderson and colleagues (2021) examined parental worries, parental racial socialization competency and psychosocial problems in the parents' adolescents. They found that racial socialization moderated the relationship between worry and psychosocial problems such that greater racial socialization competency lessened the significance of the relationship between worry and psychosocial problems. These findings suggest that while racial socialization is likely a protective factor for Black families in a myriad of situations, other protective factors such as familial support should be incorporated as they may play a significant role in resilience and adaptability. As stated previously, to learn more about these protective factors, additional research should be conducted with a larger sample of participants.

Overall, these findings suggest the probability that protective factors for Black families may include family dynamics, such as family cohesion, as well as additional experiences like racial socialization during adversity. Although the COVID-19 pandemic has come to an end, research on these topics should continue to be conducted as they could be beneficial for Black families in post-COVID pandemic world as well. In future pandemics or public health crises, it is

possible that minoritized populations may be impacted in similar ways as COVID-19, HIV/AIDS, SARS, H1N1, Ebola and Zika. These findings may assist in limiting the significance of the impact if we are aware of these protective factors for our vulnerable populations and utilize them. Additionally, while the COVID-19 pandemic has come to a halt, the world continues to experience other adversities that include but are not limited to racial injustices, gender inequalities, and natural disasters that are continuing to impact our minoritized communities. Currently, our minoritized populations continue to experience a lack of access to health care, increases in maternal mortality rates, decreases in women's' bodily rights, and a lack of resources related to natural disasters such as the recent Hurricane Maria (Coen-Sanchez et al., 2022; Laurencin & McClinton, 2020; Rodriguez, 2018; Scaramutti et al., 2019). The above protective factors may also serve as a buffer for these additional known adversities as well as unforeseen future adversities that will most certainly occur in our ever-evolving world.

Strengths and Limitations

The current study contributes valuable knowledge regarding the impact of COVID-related stressors on family functioning within a vulnerable population. Much of the current literature reflects on the significant impact the COVID-19 pandemic has had on minoritized populations; however, there has been a lack of integration of additional concerns occurring during the pandemic that play a significant role such as racial discrimination. Additionally, extant literature has placed most of the focus on risk factors while neglecting the importance of protective factors, which this study attempted to incorporate. This study is one of the very few that has examined the impact of two pandemics, COVID-19, and several publicized racial injustices, occurring simultaneously within the Black community, to determine the impact it has

had on these families as well as examine the way in which protective factors may assist in navigating these particular adversities.

While the current study has strengths, there are also noticeable limitations. The current study only included the experiences of female identifying mother/mother-like caregivers with school-aged children during the pandemic. This neglects to provide the experiences of fathers or father-like caregivers. Based on previous literature, mothers and fathers experience family relationships differently (Broderick et al., 2019; Christopher et al., 2015; Varga & Gee, 2017) . For fathers, perception of the parent romantic relationship appears to be a very important factor that is likely to impact other relationships such as the coparenting relationship and parent-child relationship (Carlson & McLanahan, 2010; Tach et al., 2010; Varga & Gee, 2017). Whereas for mothers, family dynamics associated with parenting, such as the coparenting relationship, can be a very important factor related to the satisfaction of other family relationships such as parent relationship quality (Broderick et al., 2019; Christopher et al., 2015). Therefore, if this study was conducted with fathers, we may expect to see the importance of parent relationship quality and/or family cohesion. It also may be beneficial to include caregivers with children under five years old and/or to focus on specific age groups because research has shown that racial socialization messages vary based on the age of children (Anderson & Stevenson, 2019; Caughy et al., 2006; Caughy et al., 2011). Similarly, the age of children may impact the level of stress parents could experience have due to the varying level of monitoring and/or teaching that may have had to be done based on the child's age and level of development (Brown et al.,2020; Daks et al., 2020). Additionally, participants had to be living with a romantic partner; therefore, the experiences of single parents were excluded as well. Furthermore, the current study only focused on the experiences of one marginalized community severely impacted by the COVID-19

pandemic. Lastly, the study sample also had mothers with higher-than-average levels of education such that approximately 98% had a least some college experience and approximately 43% had a graduate degree. Extant research has found that education level plays a significant role in a variety of factors such as relationship status, racial socialization messages (Brown et al.,2020; Hughes et al., 2006; Jones & Neblett, 2019). Therefore, future studies may benefit from a broader spectrum of educational levels.

When choosing the best measures for the study, the COVID-19 stressor measure used in the study, The COVID Stress Scales (Taylor et al., 2020), was established shortly after the start of the pandemic and other measures may currently be available such as the Coronavirus Stress Measure (Arslan et al., 2020) or the Fear of the COVID-19 Scale (Ahorsu et al., 2020). Furthermore, self-report measures were the only source of information for the study which could raise concerns related to the validity of the responses. The current study was also cross-sectional which makes it difficult to determine causality; other options could include a longitudinal study to determine changes over time. Data for this study were collected during the height of the pandemic when there were shelter in place requirements which made it difficult to establish trusting relationships in person with the study population which likely led to the small sample size. Lastly, the current study focused on the negative impact that COVID-related and racially discriminatory experiences had on family functioning, while it may have been beneficial to examine these relationships as protective in nature alongside experiences of racial socialization.

Implications

While we are no longer in the height of the COVID-19 pandemic, the information learned in the current study can be applied in other situations. As explored earlier, there have been several pandemics that we have been faced with before COVID-19 such as HIV/AIDS, SARS,

H1N1, Ebola and Zika, and unfortunately, we will likely be faced with them again in the future. Therefore, this knowledge could be important in allowing us to have a better idea of ways to navigate future pandemics with marginalized communities in mind. Aside from stressors and adversity occurring as a result of a pandemic, we see families and communities dealing with additional stressors due to systemic racism and health disparities. Data gathered in this study could also be applicable for managing these adversities as well as a plethora of others. Evidence in the current study and other recent research has shown that family dynamics and relationships are so powerful and can be used as protective factors for marginalized communities along with experiences of racial socialization (Anderson et al., 2021; Butler-Barnes, 2022; Galán et al., 2021; Gimarc, 2022).

Future Directions

Future research should expand on limitations mentioned regarding the current study. Future studies should strive to incorporate the experiences of fathers/father-like caregivers as well as other kinship care. Families from other marginalized communities should be incorporated into similar studies to better understand protective and risk factors that occur as a result of adversities. They should also plan to include experiences of families with younger children. In addition, including single parents or non-romantic coparents may provide additional findings as existing literature has disclosed differences between the experiences of mothers and fathers as well as differences based on the types of relationships parents or other caregivers have with each other. Future studies may also benefit from gathering the perspectives of more than one caregiver as well as the perceptions of the child. While the current study only utilized self-reports, future studies may benefit from additional methods for obtaining data such as observations or interviews. Other important factors to consider may be additional stressors, health-related

information, and mental health concerns for both caregivers and children, and even types of jobs caregivers have, as these factors could be significant when examining family functioning.

REFERENCES

Aburto, J. M., Kristensen, F. F., & Sharp, P. (2020). Black-white disparities during an epidemic: Life expectancy and lifespan disparity in the US, 1980-2000. *Economics and Human Biology, 40,* 100937. https://doi.org/10.1016/j.ehb.2020.100937

Addo, I.Y. (2020). Double pandemic: Racial Discrimination amid coronavirus disease 2019. *Social Sciences & Humanities, 2*(1), 10000734. https://doi.org/10.1016/j.ssaho.2020.100074

Adesogan, O., Lavner, J.A., Carter, S.E., and Beach, S.R.H. (2022). COVID-19 Stress and the health of Black Americans in the rural south. *Clinical Psychological Science, 10(6),* 1111-1128. https://doi.org/10.1177/21677026211049379

Ahorsu, D.K., Lin, C.Y., Imani, V., Saffari, M., Griffiths, M.D., & Pakpour, A. H. (2020). The Fear of COVID-19 Scale: Development and initial validation. *International Journal of Mental Health & Addiction, 20,* 1537-1545. https://doi.org/10.1007/s11469-020-00270-8

Ajilore, O. & Thames, A.D. (2020). The fire this time: The stress of racism, inflammation and COVID-19. *Brain, Behavior, & Immunity, 88,* 66-67. https://doi.org/10.1016/j.bbi.2020.06.003

Alegría, M., Canino, G., & Pescosolido, B. (2009). A socio-cultural framework for mental health and substance abuse service disparities. *Comprehensive Textbook of Psychiatry. Sadock, BJ.; Sadock, VA.; Baltimore, Ruiz O., editors. Wolter Kluwer Health, Lippincott Williams & Wilkins,* 4379-4379.

Alegría, M., Pescosolido, B.A., Williams, S., & Canino, G. (2011). Culture race/ethnicity and disparities: Fleshing out the socio-cultural framework for health services disparities. In

Handbook of the sociology of health, illness, and healing (pp. 363-382). Springer, New York, NY. https://doi.org/10.1007/978-1-4419-7261-3_19

Anderson, R.E., Jones, S.C.T., Navarro, C.C., McKenny, M.C., Mehta, T.J., & Stevenson, H.C. (2018). Addressing the mental health needs of Black American youth and families: A case study from the EMBRace intervention. *International Journal of Environmental Research and Public Health, 15,* 898-914. https://doi.org/10.3390/ijerph15050898

Anderson, R.E., Jones, S.C.T., Saleem, F.T., Metzger, I., Anyiwo, N., Nisbeth, K.S., Bess, K.D., Resnicow, K., & Stevenson, H.C. (2021). Interrupting the pathway from discrimination to Black adolescent's psychosocial outcomes: The contribution of parental worries and racial socialization competency. *Child Development, 92*(6), 2375-2394. https://doi.org/10.1111/cdev.13607

Anderson, R.E., McKenny, M.C. & Stevenson, H.C. (2019). EMBRace: Developing a racial socialization intervention to reduce racial stress and enhance racial coping among Black parents and adolescents. *Family Process, 58,* 53-67. https://doi.org/10.1111/famp.12412

Anderson, R.E., Metzger, I., Applewhite, K., Sawyer, B., Jackson, W., Flores, S., …Carter, R. (2020). Hands up, now what?: Black families reactions to racial socialization interventions. *Journal of Youth Development, 15*(5), 93-109. https://doi.org/10.5195/jyd.2020.755

Anderson, R.E. & Stevenson, H.C. (2019). RECASTing racial stress and trauma: Theorizing the healing potential of racial socialization in families. *American Psychologist, 74*(1), 63-75. https://doi.org/10.1037/amp0000392

Arjouch, K.J., Reisine, S., Lim, S., Sohn, W., & Ismail, A. (2010). Perceived everyday discrimination and psychological distress: Does social support matter? *Ethnicity & Health, 15*(4), 417-434. https://doi.org/10.1080/13557858.2010.484050

Arslan, G., Yildirim, M,m Tanhan, A., Bulus, M., & Allen, K. (2020). Coronavirus Stress, Optimism-Pessimism, Psychological Inflexibility, and Psychological Health: Psychometric Properties of the Coronavirus Stress Measure. *International Journal of Mental Health & Addiction, 19,* 2423-2439. https://doi.org/10.1007/s11469-020-00337-6

Asmundson, G. J. G., Paluszek, M. M., Landry, C. A., Rachor, G. S., McKay, D., & Taylor, S. (2020). Do pre-existing anxiety-related and mood disorders differentially impact COVID-19 stress responses and coping? *Journal of Anxiety Disorders, 74,* 102271. https://doi.org/10.1016/j.janxdis.2020.102271

Baptiste, D.L., Commodore-Mensah, Y., Alexander, K.A., Jacques, K., Wilson, P.R., Akomah, J., … & Cooper, L.A. (2020). COVID-19: Shedding light on racial and health inequities in the USA. https://doi.org/10.1111/jocn.15351

Barber, S. (2020). Death by racism. *The Lancet Infectious Diseases, 20*(8), 903. https://doi.org/10.1016/S1473-3099(20)30567-3

Barton, A.W., Beach, S.R.H., Bryant, C.M., Lavner, J.A. & Brody, G.H. (2018). Stress spillover, African Americans' couple and health outcomes, and the stress-buffering effect of family-centered prevention. *Journal of Family Psychology, 32*(2), 186-196. https://dx.doi.org/10.1037/fam0000376

Belsky, J. (1981). Early Human Experience: A Family Perspective. *Developmental Psychology, 17,* 3-23. https://doi.org/10.1037/0012-1649.17.1.3

Boterhoven de Haan, K. L., Hafekost, J., Lawrence, D., Sawyer, M. G., & Zubrick, S. R. (2015). Reliability and validity of a short version of the general functioning subscale of the McMaster Family Assessment Device. *Family Process, 54,* 116-123. https://doi.org/10.1111/famp.12113

Broderick, A.V., Brelseford, G.M., & Wadsworth, M.E. (2019). Interparental Relationships among Low Income, Ethically Diverse, Two-Parent Cohabiting Families. *Journal of Child & Family Studies, 28,* 2259-2271. https://doi.org/10.1007/s10826-019-01442-4

Brown, S.M., Doom, J.R., Lechuga-Peña, S., Watamura, E.N., & Koppels, T. (2020). Stress and parenting during the global COVID-19 pandemic. *Child Abuse & Neglect, 110,* 104699. https://doi.org/10.1016/j.chiabu.2020.104699

Brown, D. L. & Tylka, T. L. (2011). Racial discrimination and resilience in African American young adults: Examining racial socialization as a moderator. *Journal of Black Psychology, 37*(3), 259-285. https://doi.org/10.1177/0095798410390689

Buck, A. A. & Neff, L. A. (2012). Stress spillover in early marriage: The role of self-regulatory depletion. *Journal of Family Psychology, 26*(5), 698-709. https://doi.org/10.1037/a0029260

Butler-Barnes, S.T. (2022). What's going on? Racism, COVID-19, and centering the voices of Black youth. *American Journal of Community Psychology, 71*(1-2), 101-113. https://doi.org/10.1002/ajcp.12646

Byles, J., Byrne, C., Boyle, M. H., & Offord, D. R. (1988). Ontario Child Health Study: Reliability and validity of the general functioning subscale of the McMaster Family Assessment Device. *Family Process,27,* 97-104. https://doi.org/10.1111/j.1545-5300.1988.00097.x

Bynum, M. S., Burton, E. T., & Best, C. (2007). Racism experiences and psychological functioning in African American College Freshmen: Is racial socialization a buffer? *Cultural Diversity & Ethnic Minority Psychology, 13*(1), 64-71. https://doi.org/10.1037/1099-9809.13.1.64

Carter, R. T., Lau, M. Y., Johnson, V., & Kirkinis, K. (2017). Racial discrimination among racial/ethnic minorities: A meta-analytic review. *Journal of Multicultural Counseling and Development, 45*(4), 232-259. https://doi.org/10.1002/jmcd.12076

Carlson, M.J. & McLanahan, S.S. (2010). Fathers in Fragile Families. In M.E. Lamb (Ed.), *The Role of the Father in Child Development* (pp. 241-269). Hoboken, NJ: John Wiley & Sons Inc.

Carlson, M.J., McLanahan, S.S., & England, P. (2004). Union Formation in Fragile Families. *Demography, 41*, 237-261. https://doi.org/10.1353/dem.2004.0012

Caughy, M. O., Nettles, S. M., & Lima, J. (2011). Profiles of racial socialization among African American parents: Correlates, context, and outcome. *Journal of Child and Family Studies, 20,* 491-502. https://doi.org/10.1007/s10826-010-9416-1

Caughy, M. O., Nettles, S. M., O'Campo, P. J., & Lohrfink, K. F.(2006). Neighborhood matters: Racial socialization and the development of young African American children. *Child Development, 77,* 1220–1236. https://doi.org/10.1111/j.1467-8624.2006.00930.x

Centers for Disease Control and Prevention. (2021). Demographic trends of COVID-19 cases and deaths in the US reported to the CDC. Retrieved on June 6, 2021 from https://covid.cdc.gov/covid-data-tracker/#demographics.

Coen-Sanchez, K., Ebenso, B., El-Mowafi, I.M., Berghs, M., Idriss-Wheeler, D., & Yaya, S. (2022). Repercussions of overturning Roe v. Wade for women across systems and

beyond borders. *Reproductive Health, 19*(1), 1-5. https://doi.org/10.1186/s12978-022-01490-y

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*(4), 385-396. https://doi.org/10.2307/2136404

Coll, C.G, Crnic, K., Lamberty, G., Wasik, B.H., Jenkins, R., Garcia, H.V. & McAdoo, H.P. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*(5), 1891-1914. https://doi.org/10.1111/j.1467-8624.1996.tb01834.x

Conger, R.D., Conger, K.J., & Martin, M.J. (2010). Socioeconomic Status, Family Processes, and Individual Development. *Journal of Marriage & Family, 72,* 685-704. https://doi.org/10.1111/j.1741-3737.2010.00725.x

Daks, J.S., Peltz, J.S., & Rogge, R.D. (2020). Psychological flexibility and inflexibility as sources of resiliency and risk during a pandemic: Modeling the cascade of COVID-19 stress on family systems with a contextual behavioral science lens. *Journal of Contextual Behavioral Science, 18,* 16-27. https://doi.org/10.1016/j.jcbs.2020.08.003

Darlington, R. B. & Hayes, A. F. (2017). Regression analysis and linear models: Concepts, applications, and implementation. New York, NY: Guildford Publications.

Davis, G. Y., & Stevenson, H. C. (2006). Racial socialization experiences and symptoms of depression among Black youth. *Journal of Child and Family Studies, 15,* 303–317. https://doi.org/10.1007/s10826-006-9039-8

Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster family assessment device. *Journal of Marital and Family Therapy, 4*(4), 19-31. https://doi.org/10.1111/j.1752-0606.1983.tb01497.x

Fauci, A.S., Lane, H.C., & Redfield, R.R. (2020). Covid-19—Navigating the uncharted. Retrieved on March 28, 2021 from https://www.nejm.org/doi/full/10.1056/nejme2002387.

Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 41,* 1149-1160. https://doi.org/10.3758/BF03193146

Feinberg, M. (2003). The internal structure and ecological context of co-parenting: A framework for research and intervention. *Parenting: Science and Practice, 3*(2), 95-31. http://purl.fcla.edu/fcla/etd/CFE0002784

Feinberg, M., Brown, L. D., & Kan, M. L. (2012). A Multi-Domain Self-Report Measure of Coparenting. *Parenting: Science & Practice, 12*(1), 1-21. https://doi.org/10.1080/15295192.2012.638870

Ford, K. R. (2009). *Making Meaning of the Messages: Transmission and Reception of Racial Socialization among African American Dyads* (Doctoral dissertation). https://www.proquest.com/docview/304938904?pq-origsite=gscholar&fromopenview=true

Frabutt, J. M., Walker, A, M., & MacKinnon-Lewis, C. (2002). Racial socialization messages and the quality of mother/child interactions in African American families. *Journal of Early Adolescence, 22*(2), 200-217. https://doi.org/10.1177/0272431602022002004

Funk, J. L. & Rogge, R. D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. *Journal of Family Psychology, 21,* 572-583. https://doi.org/10.1037/0893-3200.21.4.572

Furcei, D., Loungani, P., Ostry, J. D., & Pizzuto, P. (2022). Will COVID-19 have long-lasting effects on inequality? Evidence from past pandemics. *Journal of Economic Inequality, 20*(4), 811-839. https://doi.org/10.1007/s10888-022-09540-y

Gable, S., Belsky, J., & Crnic, K. (1992). Marriage, Parenting, and Child Development: Progress and Prospects. *Journal of Family Psychology, 5,* 276-294. https://doi.org/10.1037/0893-3200.5.3-4.276

Galán, C.A., Yu, A.C., O'Connor, J.P., Akinbola, D.T., & Anderson, R.E. (2021). Having the talk when our little ones just learned to walk: Racial socialization with young children in contemporary times. *Infant and Child Development, 31*(1), e2276. https://doi.org/10.1002/icd.2276

Gambin, M., Wozinak-Prus, M., Sekowski, M., Cudo, A., Kiepura, E., Boruszak-Kiziukiewicz, J., & Kmita, G. (2020). Factors related to positive experiences in parent-child relationship during the COVID-19 lockdown: The role of empathy, emotion regulation, parenting self-efficacy, and social support. https://doi.org/10.1002/icd.2276

Gimarc, C. (2022). *Does romantic partner support mitigate daily discrimination's association with mental health outcomes for diverse adults?* (Doctoral Dissertation). https://www.proquest.com/docview/2672350449?pq-origsite=gscholar&fromopenview=true

Harrell, S. P. (1994). The racism and life experiences scale. Unpublished manuscript. https://doi.org/10.1037/t09928-000

Harrell, S. P. (1997). Development and validation of scales to measure racism-related stress. Poster Presented at the 6th biennial conference of the Society for Community Research and Action; Columbia, SC.

Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2nd ed.). New York, NY: Guilford Publications. https://doi.org/10.1111/jedm.12050

Haynes, N., Cooper, L.A., Albert, M.A., & Association of Black Cardiologists. (2020). At the heart of the matter: Unmasking and addressing the toll of COVID-19 on Diverse Populations. *Circulation, 142(2),* 105-107. https://doi.org/10.1161/CIRCULATIONAHA.120.048126

He, M., Cabrera, N., Renteria, J., Chen, Y., Alonso, A., McDorman. S.A., Merlow, M.A., & Meich, S.M. (2021). Family functioning in the time of COVID-19 among economically vulnerable families: Risks and protective factors. *Frontiers in Psychology, 12,* 730447. https://doi.org/10.3389/fpsyg.2021.730447

Hostiner, C.E. & Miller, G.E. (2019) Protective factors for youth confronting economic hardship: Current challenges and future avenues in resilience research. *The American Psychologist, 74*(6), 641-652. https://doi.org/10.1037/amp0000520

Hughes, D., Smith, E. P., Stevenson, H. C., Rodriguez, J., Johnson, D., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology, 42,* 747–770. https://doi.org/10.1037/0012-1649.42.5.747

Hussong, A.M., Midgette, A.,J., Richards, A.N., Petrie, R.C., Coffman, J.L., & Thomas, T.E. (2022). COVID-19 life events spill-over on family functioning and adolescent adjustment. *Journal of Early Adolescence, 42*(3), 359-388. https://doi.org/10.1177/02724316211036744

Jakobsen, J. C., Gluud, C., Wetterslev, J., & Winkel, P. (2017). When and how should multiple imputation be used for handling missing data in randomized clinical trials – A practical guide with flowcharts. *BMC Medical Research Methodology, 17,* 162-172. https://doi.org/10.1186/s12874-017-0442-1

Johnson, D.R., White, L.K., Edwards, J.N. & Booth, A. (1986). Dimensions of marital quality: Toward methodological and Conceptual Refinement. Journal of Family Issues, 7(1), 31-49. https://doi.org/10.1177/019251386007001003

Jones, S. (2016). "Doing the best we can." Black parenting couples' discussions of the racial socialization process: A mixed methods analysis. https://www.proquest.com/docview/1855941508?pq-origsite=gscholar&fromopenview=true

Jones, S.C.T. & Neblett, Jr, E.W. (2019). Black parenting couples' discussions of the racial socialization process: Occurrence and effectiveness. *Journal of Child & Family Studies, 28,* 218-232. https://doi.org/10.1007/s10826-018-1248-4

Kerr, J., Schafer, P., Perry, A., Orkin, J., Vance, M., & O'campo, P. (2018). The impact of racial discrimination on African American fathers' intimate relationships. *Race and Social Problems, 10,* 134-144. https://doi.org/10.1007/s12552-018-9227-3

Lange, A., Blonk, R., & Wiers, R. W. (1998). Assessment: The Parent-Child Interaction Questionnaire, PACHIQ. *Clinical Psychology and Psychotherapy, 5,* 187-198. https://doi.org/10.1002/(SICI)1099-0879(199809)5:3<187::AID-CPP167>3.0.CO;2-W

Laurencin, C.T. & McClinton, A. (2020). The COVID-19 Pandemic: A call to action to identify and address racial and ethnic disparities. *Journal of Racial and Ethnic Health Disparities, 7,* 398-402. https://doi.org/10.1007/s40615-020-00756-0

Laurencin, C.T. & Walker, J.M. (2020). A pandemic on a pandemic: Racism and COVID-19 in Blacks. *Cell Systems, 11*(1), 9-10. https://doi.org/10.1016/j.cels.2020.07.002

Lavner, J.A., Barton, A.W., Bryant, C.M., & Beach, S.R.H. (2018). Racial discrimination and relationship functioning among African American couples. *Journal of Family Psychology, 32*(5), 686-691. https://doi.org/10.1037/fam0000415

Lavner, J.A., Barton, A.W., & Beach, S.R.H. (2019). Improving Couples' Relationship Functioning Leads to Improved Coparenting: A Randomized Controlled Trial with Rural African American Couples. *Behavior Therapy.* https://doi.org/10.1016/j.beth.2018.12.006

Le, Y., McDaniel, B.T., Leavitt, C.E., & Feinberg, M. (2016). Longitudinal Associations between Relationship Quality and Coparenting across the Transition to Parenthood: A Dyadic Perspective. *Journal of Family Psychology, 30(8),* 918-926. https://doi.org/10.1037/fam0000217

Lee, D. L., & Ahn, S. (2013). The relation of racial identity, ethnic identity, and racial socialization to discrimination-distress: A meta-analysis of Black Americans. *Journal of Counseling Psychology, 60*(1), 1-14. https://doi.org/10.1037/a0031275

Lee, D. B., Gaskin-Wasson, A. L., Jones, S. C. T., Harrell, S. P., Banks, K. H., …, Neblett Jr., E. W. (2020). The Daily Life Experiences Scale: Factor structure, reliability, validity, and measurement invariance for African American males and females. *Measurement and Evaluation in Counseling and Development,* 1-14. https://doi.org/10.1080/07481756.2020.1827436

Lesane-Brown, C.L. Scottham, K.M., Nguyen, H.X. & Sellers, R.M. (2006). Racial Socialization Questionnaire-Teen Version. Unpublished manuscript.

Lindahl, K. M. & Malik, N. M. (2011). Marital conflict typology and children's appraisals: The moderating effect of the role of family cohesion. *Journal of Family Psychology, 25*(2), 194-201. https://doi.org/10.1037/a0022888

Lopez, K. (2014). Socio-cultural perspectives of Latino children with Autism Spectrum Disorder. *Best Practices in Mental Health, 10*(2), 15-31.

Lowrey, V.F. (2022). *Poverty during COVID-19: Exploring positive outcomes and levels of family cohesion.* (Masters Thesis). https://www.proquest.com/docview/2697729663?pq-origsite=gscholar&fromopenview=true

Masarik, A.S. & Conger, R.D. (2017). Stress and Child Development: A review of the Family Stress Model. *Current Opinion in Psychology, 13,* 85-90. https://doi.org/10.1016/j.copsyc.2016.05.008

McLanahan, S. (2011). Family Instability and Complexity after a Nonmarital Birth. In M.J. Carlson & P. England (Eds.), *Social Class and Changing Families in an Unequal America,* (108-133). Stanford, CA: Stanford University Press. https://doi.org/10.1515/9780804779081-008

Miconi, D., Li, Z.Y., Frounfelker, R.L., Santavicca, T., Cénat, J. M., Venkatesh, V., & Rousseau, C. (2021). Ethno-cultural disparities in mental health during the COVID-19 pandemic: A cross-sectional study on the impact of exposure to the virus and COVID-19-related discrimination and stigma on mental health across ethno-cultural groups in Quebec (Canada). *BJPsych Open, 7*(1), 1-10. https://doi.org/ doi:10.1192/bjo.2020.146

Nguyen, D. & Bornheimer, L.A. (2014). Mental health service use types among Asian Americans with a psychiatric disorder. *Journal of Behavioral Health Sciences & Research, 41*(4), 520-528. https://doi.org/10.1007/s11414-013-9383-6

Noltemeyer, A.L. & Bush, K.R. (2013). Adversity and resilience: A synthesis of international research. *School Psychology International, 34*(5), 474-487. https://doi.org/10.1177/0143034312472758

Pager, D. & Shepherd, H. (2008). The sociology of discrimination: Racial discrimination in employment, housing, credit, and consumer markets. *Annual Review of Sociology, 34,* 181-209. https://doi.org/10.1146/annurev.soc.33.040406.131740

Pascoe, E.A. & Richman, L.S. (2009). Perceived discrimination and health: A meta-analytic review. *Psychological Bulletin, 135*(4), 531-554. https://doi.org/10.1037/a0016059

Phinney, J. S., & Chavira, V. (1995). Parental ethnic socialization and adolescent coping with problems related to ethnicity. *Journal of Research on Adolescence, 5*, 31–53. https://doi.org/10.1207/s15327795jra0501_2

Randall, A. K. & Bodenmann, G. (2008). The role of stress on close relationships and marital satisfaction. *Clinical Psychology Review, 29,* 105-115. https://doi.org/10.1016/j.cpr.2008.10.004

Rodriguez, J.M. (2018). Health disparities, politics, and the maintenance of the status quo: A new theory of inequality. *Social Science & Medicine, 200,* 36-43. https://doi.org/10.1016/j.socscimed.2018.01.010

Ruiz, N.G., Horowitz, J., & Tamir, C. (2020). Many Black and Asian Americans say they have experienced discrimination amid the COVID-19 outbreak. *Pew Research Center*. https://www.pewresearch.org/social-trends/2020/07/01/many-black-and-asian-americans-say-they-have-experienced-discrimination-amid-the-covid-19-outbreak/

Rutter, M. (2012). Resilience: Causal pathways and social ecology. In M. Ungar (Ed.), *The social ecology of resilience: A handbook of theory and practice* (pp. 33-42). New York,

NY: Springer Science + Business Media, LLC. https://doi.org/10.1007/978-1-4614-0586-3

Saini, M. (2019). Strengthening coparenting relationships to improve strained parent-child relationships: A follow-up study of parents' experiences of attending the overcoming barriers program. *Family Court Review, 57*(2), 217-230. https://doi.org/10.1111/fcre.12405

Scaramutti, C., Salas-Wright, C.P., Vos, S.R., & Schwartz, S.J. (2019). The mental health impact of hurricane Maria on Puerto Ricans in Puerto Rico and Florida. *Disaster Medicine and Public Health Preparedness, 13*(1), 24-27. https://doi.org/10.1017/dmp.2018.151

Seaton, E. K., Yip, T., & Sellers, R. M. (2009). A longitudinal examination of racial identity and racial discrimination among African American Adolescents. *Child Development, 80*(2), 406-417. https://doi.org/10.1111/j.1467-8624.2009.01268.x

Smalls, C. (2010). Effects of mothers' racial socialization and relationship quality on African American youth's school engagement: A profile approach. *Cultural Diversity & Ethnic Minority Psycholgy, 16*(4), 476-484. https://doi.org/10.1037/a0020653

Smith, S.M., Reynolds, J.E., Fincham, F.D., & Beach, S.R.H. (2016). Parental experiences of racial discrimination and youth racial socialization in two-parent African American families. *Cultural Diversity and Ethnic Minority Psychology, 22(2),* 268. https://doi.org/10.1037/cdp0000064

Sze, S., Pan, D., Nevill, C. R., Gray, L. J., Martin, C.A., …, Pareek, M. (2020). Ethnicity and clinical outcomes in COVID-19: A systemic review and meta-analysis. *EClinical Medicine, 29,* 100630. https://doi.org/10.1016/j.eclinm.2020.100630

Tach, L., Mincy, R. & Edin, K. (2010). Parenting as a "Package Deal": Relationships, Fertility, and Nonresident Father Involvement among Unmarried Parents. *Demography, 47,* 181-204. https://doi.org/10.1353/dem.0.0096

Taylor, S., Landry, C.A., Paluszek, M. M., Fergus, T. A., Mckay, D., Asmundson, G. J. G. (2020). Development and initial validation of the COVID Stress Scales. *Journal of Anxiety Disorders, 72,* 102232. https://doi.org/10.1016/j.janxdis.2020.102232

Vandsburger, E., & Grandstaff, M.A. (2004). Evaluation of the Stress Adjustment and Adaptation Model among families reporting economic pressure. *Journal of Family Social Work, 8*(2), 65-84. https://doi.org/10.1300/J039v08n02_04

Vanfraussen, K., Ponjaret-Kristoffersen, I., & Brewaeys, A. (2003). Family functioning in lesbian families created by donor insemination. *American Journal of Orthopsychiatry, 73*(1), 78-90. https://doi.org/10.1037/0002-9432.73.1.78

Varga, C.M., Gee, C.B., Rivera, L., & Reyes, C.X. (2017). Coparenting Mediates the Association between Relationship Quality and Father Involvement. *Youth & Society, 49(5),* 558-609. https://doi.org/10.1177/0044118X14548529

Wakeel, F. & Njoku, A. (2021). Application of the Weathering Framework: Intersection of racism, stigma, and COVID-19 as a stressful live event among African Americans. *Healthcare, 9,* 145-158. https://doi.org/10.3390/healthcare9020145

Wang, M-T., Henry, D. A., Smith, L. V., Huguley, J. P., & Guo, J. (2020). Parental ethnic-racial socialization practices and children of color's psychosocial and behavioral adjustment: A systematic review and meta-analysis. *American Psychologist, 75*(1), 1-22. https://doi.org/10.1037/amp0000464

Watson, M.F., Bacigalupe, G., Daneshpour, M., Han, W., & Parra-Cardona, R. (2020). COVID-19 Interconnectedness: Health Iniquity, the climate crisis, and collective trauma. *Family Process, 59,* 832-846. https://doi.org/10.1111/famp.12572

White-Johnson, R. L., Ford, K. R., & Sellers, R. M. (2010). Parental racial socialization profiles: Association with demographic factors, racial discrimination, childhood socialization, and racial identity. Cultural Diversity and Ethnic Minority Psychology, 16(2), 237. https://doi.org/10.1037/a0016111

Wilson, C. Y. (2019). *Racial socialization from parents and peers: Implications for coping with discrimination.* (Doctoral dissertation). https://scholarworks.gsu.edu/psych_diss/214/

Yancy, C.W. (2020). COVID-19 and African Americans. *JAMA, 323*(19), 1891-1892. https://doi.org/10.1001/jama.2020.6548

APPENDICES

A. Demographics Questionnaire

B. Perceived Stress

C. COVID-19 Distress/Risk

D. Racial Discrimination

E. Racial Socialization

F. Family Cohesion

G. Parent Relationship Quality

H. Coparenting Relationship

I. Parent-Child Relationship

A. DEMOGRAPHIC QUESTIONNAIRE

What is your gender?

1. Female
2. Transgender female
3. Nonbinary
4. Other _____

What is your age? _____

What is your race?

1. Black or African American
2. Asian
3. American Indian and Alaskan Native
4. Native Hawaiian and other Pacific Islander
5. White
6. Other _____

What is your ethnicity?

1. Hispanic/Latina
2. Not Hispanic/Latina

What is your relationship status?

1. Married
2. Cohabitating
3. In a relationship, not living together
4. Single
5. Separated/Divorced
6. Widowed
7. Other _____

What is your education level?

1. Some high school
2. High school diploma or GED
3. Some college
4. Undergraduate degree
5. Graduate degree

What is your household income?

1. Less than 10,000
2. 10,001 – 20,000
3. 20,001 – 30,000
4. 30,001 – 40,000
5. 40,001 – 50,000
6. 50,001 – 60,000
7. 60,001 – 70,000
8. 70,001 – 80,000
9. 80,001 – 90,000
10. 90,001 – 100,000
11. 100,001 and above

How much are finances an issue for you or your immediate family?

1. Difficulty meeting my/my family's basic needs
2. Barely able to meet my/my family's basic needs
3. Once-in-a-while have difficulty covering my/my family's basic needs
4. No difficulty covering basic needs
5. Have extra money each month

Were there changes in your employment status during the pandemic?

1. Decrease in hours at initial job(s)
2. Loss of employment at initial job(s)
3. Increase in hours at initial job(s)
4. One new job during the pandemic
5. Loss of employment of one new job
6. Multiple new jobs during the pandemic
7. Loss of employment of multiple jobs

Did you receive unemployment benefits during the pandemic?

1. Yes
2. No

Did you have health insurance before the pandemic began?

1. Yes
2. No

Did you have health insurance during the pandemic?

1. Yes
2. No

Do you currently have health insurance?

1. Yes
2. No

How many children do you have?

1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7 or more

How old are your children? _____

What is the gender of each of your children?

1. Male
2. Female
3. Transgender male
4. Transgender female
5. Nonbinary
6. Other

   If other, please specify _____

What is the age of your oldest child? _____

*This is the child you will consider when completing the rest of the survey. *

What is the gender of your oldest child?

1. Male
2. Female

3. Transgender male
4. Transgender female
5. Nonbinary
6. Other

   If other, please specify _____

What best describes your caregiver relationship with the child?

1. Biological mother
2. Stepmother
3. Adoptive mother
4. Grandmother
5. Aunt
6. Other relative caregiver

   If other, please specify _____
7. Other

If other, please specify _____

What best describes your partner's parenting relationship with the child?

1. Biological parent
2. Stepparent
3. Adoptive parent
4. Grandfather
5. Uncle
6. Other relative caregiver

   If other, please specify _____
7. Other

If other, please specify _____

In the past year, how many school-aged children have you had living with you? _____

In the past year, what were the schooling arrangements for these children?

1. Home schooled/Virtual learning
2. In-person

3. Hybrid
4. Other

   If other, please specify _____

B. PERCEIVED STRESS

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will 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.

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. In the last month, how often have you dealt successfully with irritating life hassles?

*5. In the last month, how often have you felt that you were effectively coping with important changes were occurring in your life?

*6. In the last month, how often have you felt confident about your ability to handle your personal

problems?

*7. In the last month, how often have you felt that things were going your way?

8. In the last month, how often have you found that you could not cope with all the things that you had to do?

*9. In the last month, how often have you been able to control irritations in your life?

*10. In the last month, how often have you felt that you were on top of things?

11. In the last month, how often have you been angered because of things that happened that were outside of your control?

12. In the last month, how often have you found yourself thinking about things that you have to accomplish?

*13. In the last month, how often have you been able to control the way you spend your time?

14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Items with * should be reverse coded.

C. COVID-19 DISTRESS/RISK

The COVID Stress Scales

The following asks about various kinds of worries that you might have experienced ***over the past seven days***. In the following statements, we refer to COVID-19 as "the virus".

	Not at all	Slightly	Moderately	Very	Extremely
1. I am worried about catching the virus	0	1	2	3	4
2. I am worried that I can't keep my family safe from the virus	0	1	2	3	4
3. I am worried that our healthcare system won't be able to protect my loved ones	0	1	2	3	4
4. I am worried our healthcare system is unable to keep me safe from the virus	0	1	2	3	4
5. I am worried that basic hygiene (e.g., handwashing) is not enough to keep me safe from the virus	0	1	2	3	4
6. I am worried that social distancing is not enough to keep me safe from the virus	0	1	2	3	4
7. I am worried about grocery stores running out of food	0	1	2	3	4
8. I am worried that grocery stores will close down	0	1	2	3	4
9. I am worried about grocery stores running out of cleaning or disinfectant supplies	0	1	2	3	4
10. I am worried about grocery stores running out of cold or flu remedies	0	1	2	3	4
11. I am worried about grocery stores running out of water	0	1	2	3	4
12. I am worried about pharmacies running out of prescription medicines	0	1	2	3	4
13. I am worried that foreigners are spreading the virus in my country	0	1	2	3	4
14. If I went to a restaurant that specialized in foreign foods, I'd be worried about catching the virus	0	1	2	3	4

15. I am worried about coming into contact with foreigners because they might have the virus	0	1	2	3	4
16. If I met a person from a foreign country, I'd be worried that they might have the virus	0	1	2	3	4
17. If I was in an elevator with a group of foreigners, I'd be worried that they're infected with the virus	0	1	2	3	4
18. I am worried that foreigners are spreading the virus because they're not as clean as we are	0	1	2	3	4
19. I am worried that if I touched something in a public space (e.g., handrail, door handle), I would catch the virus	0	1	2	3	4
20. I am worried that if someone coughed or sneezed near me, I would catch the virus	0	1	2	3	4
21. I am worried that people around me will infect me with the virus	0	1	2	3	4
22. I am worried about taking change in cash transactions	0	1	2	3	4
23. I am worried that I might catch the virus from handling money or using a debit machine	0	1	2	3	4
24. I am worried that my mail has been contaminated by mail handlers	0	1	2	3	4

Please read each statement and indicate how frequently you have experienced each problem ***during the past seven days.***

	Never	**Rarely**	**Sometimes**	**Often**	**Almost Always**
25. I had trouble concentrating because I kept thinking about the virus	0	1	2	3	4
26. Disturbing mental images about the virus popped into my mind against my will	0	1	2	3	4
27. I had trouble sleeping because I worried about the virus	0	1	2	3	4
28. I thought about the virus when I didn't mean to	0	1	2	3	4

29. Reminders of the virus caused me to have physical reactions, such as sweating or a pounding heart	0	1	2	3	4
30. I had bad dreams about the virus	0	1	2	3	4

The following items ask about checking behaviours. ***During the past seven days,*** how much have you done the following because of concerns about COVID-19?

	Never	**Rarely**	**Sometimes**	**Often**	**Almost Always**
31. Searched the Internet for treatments for COVID-19	0	1	2	3	4
32. Asked health professionals (e.g., doctors or pharmacists) for advice about COVID-19	0	1	2	3	4
33. Checked YouTube videos about COVID-19	0	1	2	3	4
34. Checked your own body for signs of infection (e.g., taking your temperature)	0	1	2	3	4
35. Sought reassurance from friends or family about COVID-19	0	1	2	3	4
36. Checked social media posts concerning COVID-19	0	1	2	3	4

COVID-19 RISK FACTORS

Please indicate whether you or your child experienced any stressors as a result of COVID-19 stay-at-home restrictions and school and childcare closures in the following domains by responding 0 (No) or 1 (Yes).

1. Parent mood or stress
2. Parent physical health
3. Parent relationship/interactions with partner
4. Parent relationship/interactions with child(ren)

5. Child(ren)'s physical health
6. Child(ren)'s academics/learning
7. Do you know someone who tested positive for COVID-19?
8. Do you know someone who has died from COVID-19?

D. RACIAL DISCRIMINATION

Please indicate how often the below events have occurred to you in the past year because of your race.

0 = Never, 1 = Less than once, 2 = A few times, 3 = About once a month, 4 = A few times a month, 5 = Once a week or more

1. Being ignored, overlooked, or not given service (in a restaurant, store, etc.)
2. Being treated rudely or disrespectfully
3. Being accused of something or treated suspiciously
4. Others reacting to you as if they were afraid or intimidated
5. Being observed or followed while in public places
6. Being treated as if you were "stupid", being "talked down to"
7. Your ideas or opinions being minimized, ignored or devalued
8. Overhearing or being told an offensive joke or comment
9. Being insulted, called a name, or harassed
10. Others expecting your work to be inferior
11. Not being taken seriously
12. Being left out of conversations or activities
13. Being treated in an "overly" friendly or superficial way
14. Other people avoiding you
15. Being mistaken for someone who serves others
16. Being stared at by strangers
17. Being laughed at, made fun of, or taunted
18. Being mistaken for someone else

E. RACIAL SOCIALIZATION

Please respond to the following statements using the response scale ranging from 0 (Never), 1 (Once or Twice), 2 (More than Twice).

How often have you told [CHILD] that:

Egalitarian Messages

1. Blacks and Whites should try to understand each other so they can get along.
2. Because of opportunities today, hardworking Blacks have the same chance to succeed as anyone else.
3. You should try to have friends from all different races.
4. You can learn things from people of different races.

Negative Messages

1. Learning about Black history is not that important.
2. It is best to act like Whites.
3. Being Black is nothing to be proud of.
4. White businesses are more reliable that white businesses.
5. Blacks are not as smart as other races.

Racial Barrier Messages

1. Some people think that they are better than you because of their race.
2. Blacks have to work twice as hard as Whites to get ahead.
3. Some people may dislike you because of the color of your skin.
4. Some people tried to keep Black people from being successful.

Racial Pride Messages

1. Been involved in activities that focus on things important to Black people?

2. Talked with [CHILD] about Black history.
3. Told [CHILD] that they should be proud to be Black.
4. Told [CHILD] to never be ashamed of your Black features (hair texture, lip shape, skin color, etc.)

Socialization Behaviors

1. Gone with [CHILD] to Black cultural events (plays, movies, concerts, museums).
2. Gone with [CHILD] to cultural events involving other races and cultures (plays, movies, and concerts).
3. Went with [CHILD] to organization meetings that dealt with Black issues.
4. Brought [CHILD] books about Black people.
5. Brought [CHILD] Black toys or games.

Self-Worth Messages

1. Told [CHILD] that they are somebody special, no matter what anybody says.
2. Told [CHILD] to be proud of who they are.
3. Told [CHILD] that skin color does not define who you are.
4. Told [CHILD] that they can be whatever they want to be.

Parent's Childhood Racial Socialization Experiences

Please reflect on how frequently you received racial socialization messages from parents, peers, and other adults during your childhood and adolescence. Please respond to the following statements using 1 (Never), 2 (Rarely), 3 (Occasionally), 4 (Often), 5 (Very Often).

1. How often did your parents of the people who raised you talk about race, racism or other groups?

2. Not including your parents of the people who raised you, how often did other close relatives such as your brothers, sisters, aunts, uncles, and grandparents talk with you about race, racism or other groups?
3. How often did your friends talk about race, racism or other groups?
4. How often did other adults such as church members, your teachers, or neighbors talk to you about race, racism or other groups?

F. FAMILY COHESION

Family Assessment Device - General Functioning Scale

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1. Planning family activities is difficult because we misunderstand each other.

__SA __A __D __SD __

2. In times of crisis we can turn to each other for support.

__SA __A __D __SD __

3. We cannot talk to each other about the sadness we feel.

__SA __A __D __SD __

4. Individuals are accepted for what they are.

__SA __A __D __SD __

5. We avoid discussing our fears and concerns.

__SA __A __D __SD __

6. We can express feelings to each other.

__SA __A __D __SD __

7. There are lots of bad feelings in the family.

__SA __A __D __SD __

8. We feel accepted for what we are.

__SA __A __D __SD __

9. Making decisions is a problem for our family.

__SA __A __D __SD __

10. We are able to make decisions about how to solve problems.

__SA __A __D __SD __

11. We don't get along well together.

__SA __A __D __SD __

12. We confide in each other.

__SA __A __D __SD __

G. PARENT RELATIONSHIP QUALITY

Couples Satisfaction Index (CSI-32)

Please indicate the degree of happiness, all things considered, of your relationship.

Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect
0	1	2	3	4	5	6

Most people have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item on the following list.

	Always Agree	Almost Always Agree	Occa-sionally Disagree	Fre-quently Disagree	Almost Always Disagree	Always Disagree
Amount of time spent together	5	4	3	2	1	0
Making major decisions	5	4	3	2	1	0
Demonstrations of affection	5	4	3	2	1	0

	All the time	Most of the time	More often than not	Occa-sionally	Rarely	Never
In general, how often do you think that things between you and your partner are going well?	5	4	3	2	1	0
How often do you wish you hadn't gotten into this relationship?	0	1	2	3	4	5

	Not at all TRUE	A little TRUE	Some-what TRUE	Mostly TRUE	Almost Completely TRUE	Completely TRUE
I still feel a strong connection with my partner	0	1	2	3	4	5
If I had my life to live over, I would marry (or live with / date) the same person	0	1	2	3	4	5
Our relationship is strong	0	1	2	3	4	5
I sometimes wonder if there is someone else out there for me	5	4	3	2	1	0
My relationship with my partner makes me happy	0	1	2	3	4	5
I have a warm and comfortable relationship with my partner	0	1	2	3	4	5
I can't imagine ending my relationship with my partner	0	1	2	3	4	5
I feel that I can confide in my partner about virtually anything	0	1	2	3	4	5
I have had second thoughts about this relationship recently	5	4	3	2	1	0
For me, my partner is the perfect romantic partner	0	1	2	3	4	5
I really feel like **part of a team** with my partner	0	1	2	3	4	5
I cannot imagine another person making me as happy as my partner does	0	1	2	3	4	5

	Not at all	A little	Some-what	Mostly	Almost Completely	Completely
How rewarding is your relationship with your partner?	0	1	2	3	4	5
How well does your partner meet your needs?	0	1	2	3	4	5
To what extent has your relationship met your original expectations?	0	1	2	3	4	5
In general, how satisfied are you with your relationship?	0	1	2	3	4	5

	Worse than all others (Extremely bad)					Better than all others (Extremely good)
How good is your relationship compared to most?	0	1	2	3	4	5

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
Do you enjoy your partner's company?	0	1	2	3	4	5
How often do you and your partner have fun together?	0	1	2	3	4	5

For each of the following items, select the answer that best describes *how you feel about your relationship*. Base your responses on your first impressions and immediate feelings about the item.

INTERESTING	5	4	3	2	1	0	BORING
BAD	0	1	2	3	4	5	GOOD
FULL	5	4	3	2	1	0	EMPTY
LONELY	0	1	2	3	4	5	FRIENDLY
STURDY	5	4	3	2	1	0	FRAGILE
DISCOURAGING	0	1	2	3	4	5	HOPEFUL
ENJOYABLE	5	4	3	2	1	0	MISERABLE

H. COPARENTING RELATIONSHIP

For Each item, select the response that best describes the way you and your partner work together as parents:

0	1	2	3	4	5	6
Not true of us		A little bit true of us		Somewhat true of us		Very true of us

1. I believe my partner is a good parent.
2. My relationship with my partner is stronger now than before we had a child.
3. My partner asks my opinion on issues related to parenting.
4. My partner pays a great deal of attention to our child.
5. My partner likes to play with our child and then leave dirty work to me. **(R)**
6. My partner and I have the same goals for our child.
7. My partner still wants to do his or her own thing instead of being a responsible parent. **(R)**
8. It is easier and more fun to play with the child alone than it is when my partner is present too.
9. My partner and I have different ideas about how to raise our child. **(R)**
10. My partner tells me I am doing a good job or otherwise lets me know I am being a good parent.
11. My partner and I have different ideas regarding our child's eating, sleeping, and other routines. **(R)**
12. My partner sometimes makes jokes or sarcastic comments about the way I am as a parent.
13. My partner does not trust my abilities as a parent.
14. My partner is sensitive to our child's feelings and needs.

15. My partner and I have different standards for our child's behavior. **(R)**

16. My partner tries to show that she or he is better than me at caring for our child.

17. I feel close to my partner when I see him or her play with our child.

18. My partner has a lot of patience with our child.

19. We often discuss the best way to meet our child's needs.

20. My partner does not carry his or her fair share of the parenting work. **(R)**

21. When all three of us are together, my partner sometimes competes with me for our child's attention.

22. My partner undermines my parenting.

23. My partner is willing to make personal sacrifices to help take care of our child.

24. We are growing and maturing together through experiences as parents.

25. My partner appreciates how hard I work at being a good parent.

26. When I'm at my wits end as a parent, partner gives me extra support I need.

27. My partner makes me feel like I'm best possible parent for our child.

28. The stress of parenthood has caused my partner and me to grow apart. **(R)**

29. My partner doesn't like to be bothered by our child. **(R)**

30. Parenting has given us a focus for the future.

These questions ask you to describe things you do when both you and your partner are physically present together with your child (i.e. in the same room, in the car, on outings).

Count only timeswhen all three of you are actually within the company of one another (even if this is just a few hours per week).

0	1	2	3	4	5	6
Never		Sometimes (once or twice a week)		Often (once a day)		Very Often (several times a day)

How often in a **typical week**, **when all 3 of you are together**, do you:

31 Find yourself in a mildly tense or sarcastic interchange with your partner?

32 Argue with your partner about your child, in the child's presence?

33 Argue about your relationship or marital issues unrelated to your child, in the child's presence?

34 One or both of you say cruel or hurtful things to each other in front of the child?

35 Yell at each other within earshot of the child?

I. PARENT-CHILD RELATIONSHIP

Please indicate how often you display this behavior or experience these feelings by choosing one of the following five categories: 0-Never, 1-Hardly Ever, 2-Sometimes, 3-Almost Always, 5-Always

When [CHILD] does not feel like cleaning up his/her room, he/she does not have to.

[CHILD] breaks our house rules every day.

I find it difficult to say something kind to [CHILD].

[CHILD] and I have many conflicts that we are unable to solve.

I do not accept criticism from [CHILD].

I am often dissatisfied with [CHILD].

When [CHILD] has done something wrong he/she can talk about it with me without getting punished.

I accept [CHILD] as he/she is.

I take most of the decisions regarding [CHILD] without discussing them with him/her.

[CHILD] does his/her chores, without me having to remind him/her to do so.

[CHILD] really trusts me.

I take my time to listen to [CHILD].

[CHILD] and I often quarrel.

I show my appreciation clearly when [CHILD] does something for me.

When I spend the whole day with [CHILD], he/she starts to get on my nerves.

I like to listen to [CHILD]'s stories.

It seems like [CHILD] thinks he/she is the boss in the house.

I enjoy touching [CHILD].

I comfort [CHILD] when there is something the matter with him/her.

If [CHILD] doesn't listen, he/she will get slapped.

IF [CHILD] wants to stay with a friend, he/she has to ask my permission first.

I decide which friend [CHILD] plays with.

I don't feel like listening to what [CHILD] has been doing.

When [CHILD] and I differ in opinion, I shout at him/her.

If [CHILD] doesn't do what I say, I usually don't bother about it.

[CHILD] listens when I explain something.

When I am angry with [CHILD], I don't let it show.

I am very proud of [CHILD].

I compliment [CHILD].

When [CHILD] is upset, it is unclear to me what is going on.

VITA

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Education

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Selected Publications and Presentations

Alexander, R.L., Kiser, E., & Luzier, J. (2023, June). The impact of social support factors on eating disorder treatment outcomes. Poster presented at the International Conference on Eating Disorders, Washington, DC.

Alexander, R.L., Thompson, S., Weisenmuller, C., Calderwood, L., & Emrick, B. (2022, October). Impact of the COVID-19 pandemic on hospital length of stay in West Virginian Pediatric Patients. Poster presented at the West Virginia Psychological Association Conference, Davis, WV.

Alexander, R.L. & Paulson, J.F. (2020, May). The predictive validity of relationship quality and the coparenting relationship on relationship longevity in fragile families. Poster presented at the American Psychological Association Conference, Washington, DC.

Paulson, J.F., Ellis, K.T., & **Alexander, R.L.** (2020). Prenatal and postnatal depression in fathers. In Fitzgerald, H., von Klitzing, K., Carbara, N., Skjothaug, T., & de Mendonca, J. S. (Eds.), *Handbook of Fathers: Prenatal to PreK*. New York, NY: Springer Press.