

Maternal Stress, Family Functioning, and Child Well-Being According to Latinx Mothers With
Young Children: A Mixed Methods Approach

by

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DISSERTATION ABSTRACT

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Title: Maternal Stress, Family Functioning, and Child Well-Being According to Latinx Mothers With Young Children: A Mixed Methods Approach

While there is an inextricable link between parental stress and child well-being, considerably less research has examined this relationship among Latinx parent-child dyads despite their unique experiences in the United States. The well-being of U.S. Latinx children is often shaped by economic hardship, family interactions, and the level and types of stress their mothers experience. The Coronavirus 2019 pandemic was an unprecedented situation by which the relationship between stressors experienced by Latinx mothers and child well-being may be further understood. The goal of this dissertation was to use mixed methods to advance the field's understanding of the relationship between maternal stress, family functioning, and child well-being in Latinx mothers who have young children in a sample of mothers who participated in the Rapid Assessment of Pandemic Impact on Development–Early Childhood project between April 2020 and April 2022. Part one tested the association between material hardship, maternal stress, intrafamily conflict, maternal experiences of racism and discrimination, and child well-being via quantitative data from a national sample of Latinx mothers. Part two explored mothers' lived experiences of stress via qualitative data from a subsample of Latinx mothers who resided in Oregon.

This dissertation found evidence that material hardship was associated with Latinx mothers' maternal stress, which was associated with their child's well-being. These associations were found after examining quantitative data from the national sample of Latinx mothers and

contextualized by qualitative data analysis from the subset of Latinx mothers who lived in Oregon. When further examining factors that may influence the association between maternal stress and child well-being, this dissertation did not find evidence that the association was mediated by intrafamily conflict or moderated by maternal experiences of racism and discrimination. When asked about their most significant challenges, mothers noted concerns about factors such as the availability of childcare and school, their health and safety, and concerns around maternal stress, child well-being, and family relationships. Mothers also reported many factors that helped them and their families through the pandemic, including financial support, having a positive mindset with coping skills, and culturally relevant factors such as family cohesion and community support.

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DEDICATION

This dissertation is dedicated to my mami, Ester Hernandez Villa, and all the other Latinx women who do all they can to support themselves, their families, and their communities.

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CHAPTER I

GENERAL INTRODUCTION

While there is an inextricable link between parental stress and child well-being, considerably less research has examined this relationship among Latinx parent-child dyads despite their unique experiences in the United States (U.S.). Latinxs continue to be the largest minoritized group in the U.S., with children driving most of the population growth (U.S. Census Bureau, 2021). Therefore, consideration of factors that influence Latinx children's well-being is critical. The well-being of these children is often shaped by financial stressors and economic hardship, interactions within the family system, and the level and types of stress their mothers experience (e.g., Palermo et al., 2018; White et al., 2015). The Coronavirus 2019 pandemic (COVID-19 pandemic) was an unprecedented situation by which the relationship between stressors experienced by Latinx mothers and child well-being may be further understood. Furthermore, the pandemic exacerbated health disparities and social inequities for which the Latinx community was particularly vulnerable on metrics of morbidity and mortality, financial burdens, and further restricted access to basic needs (Center for Disease and Control Prevention, 2020; Garcia et al., 2021). The challenges Latinxs face have resulted in widespread material hardship, increased caregiving burden, especially for mothers, disruptions in social relationships, and related parental stressors. These difficulties may have long-lasting impacts on parents and the well-being of their children.

This dissertation centers on the relationship between maternal stress and child well-being among Latinx families with young children. To examine this relationship, this dissertation leverages an existing national dataset (Rapid Assessment of Pandemic Impact on Development - Early Childhood) that surveyed over 2000 Latinx families with children ages 0-5 starting in April

2020 as the COVID-19 pandemic was beginning and focused on three important contextual factors to extend various existing theoretical models. These three factors were selected based on their centrality to models especially relevant to Latinx families, the nature of the COVID-19 pandemic, and their availability within the RAPID-EC survey, namely material hardship, intrafamily conflict, and maternal experiences of racism and discrimination. Including these three contextual factors does not dismiss the relevance of other key contributors that impact the association between maternal stress and child well-being. Some additional factors will be briefly introduced for context, as they are relevant to the key variables and associations of interest.

This first chapter begins with a review of relevant literature on Latinx mothers and associated factors that influence their families, children, and themselves. First, the chapter briefly introduces key socio-demographic and definition considerations before delving into some broad sociocultural characteristics of U.S. Latinx culture. Next, the relevant literature on crucial contextual factors, including maternal stress, maternal experiences of racism and discrimination, family functioning, and child well-being, are described. The chapter ends with a brief summary of the broader COVID-19 pandemic before describing this dissertation's mixed-methods approach and specific aims.

This dissertation utilizes mixed methods as this type of research draws on the potential strengths of both quantitative and qualitative methods, allowing researchers to explore diverse perspectives and ask multidimensional research questions (e.g., Shorten & Smith, 2017). The models tested examine maternal stress as the central variable predicting child well-being via various associations. As the literature has highlighted the downstream effects of factors at the familial and maternal level on child well-being, this dissertation begins by testing material hardship as a predictor of maternal stress. Next, it examines the effect of intrafamily conflict on

the relationship between maternal stress and child well-being. Lastly, it investigates maternal stress in the context of maternal experiences of racism and discrimination in predicting child well-being. This dissertation then utilizes qualitative methods, specifically thematic coding, to contextualize and expand the interpretation of the quantitative analyses.

U.S. Latinx Women: Socio-Demographic and Definition Considerations

When discussing the well-being of Latinx mothers and children, two important considerations that are necessary to introduce briefly pertain to definition considerations and population changes. First, this dissertation uses Harris and Santos's (2020) definition of Latinx to refer to individuals of Latin American origin or descent, including Mexico, South and Central America, Cuba, and Puerto Rico. Of note, people identifying as Latinx vary in their genetic ancestry and may be of any race (Black or African American, White or European American, Asian, Native American, Native Hawaiian or Pacific Islander) or multiracial (Enid Zambrana et al., 2021). The term Latinx will also be used as it is a gender-inclusive term. Therefore, it is essential to acknowledge that the Latinx community is diverse, includes individuals from many different countries and regions, and people may vary in preference for the terms used for self-identification. Secondly, Latinx individuals continue to be the largest minority group in the U.S. (United States Census Bureau, 2021), and that pattern is expected to continue throughout the following decades. Currently, it is estimated that 19% of the U.S. population identifies as Latinx.

Latinx Culture and Relevant Contextual Factors

Despite the heterogeneity among Latinx individuals, scholars and researchers argue that some common factors and characteristics are valued within Latinx cultures that influence the well-being of adults, children, and families. It is important to note that newer areas of research

with U.S. Latinxs have underscored the influence of shared colonial histories, including that of Spanish conquest, colonization, and migration as a unifying element that makes cultural values similar in language, religion, and family and social support networks (Salgado de Snyder et al., 2021). Regarding language, the Pew Research Center reported that in 2022, 39.7 million U.S. Latinos spoke Spanish in their home and that Spanish is the 2nd most commonly spoken language in the U.S. (Pew Research Center, 2023b). Broadly speaking, Latinxs come from a collectivistic culture where accountability is collective, responsibility is shared, and family cohesion is paramount (e.g., Cardoso & Thompson, 2010). Therefore, traditional Latinx values greatly emphasize creating a harmonious atmosphere within the family system. A focus on family cohesiveness and loyalty, as well as placing the needs of the family before one's own, is often referred to as "familismo" and can be a significant source of both social and emotional support for individuals and the family unit (e.g., Kuhlberg et al., 2010). Traditionally oriented families are hierarchal, with authority given to parents, older family members, and males. Everyone has a specified role within this family structure: fathers are the providers, mothers are caregivers, grandparents provide counsel, and children are obedient (Lopez-Baez, 2006). Across traditional gender roles, women are expected to provide nurturance and maintain harmony within the household, all while being modest, self-sacrificing, virtuous, and subordinate to others (termed "marianismo") (e.g., Castillo et al., 2010). Strong cultural identification and the maintenance of traditional values may promote a sense of belonging, which can serve as a protective asset against distress within the community, family, and individual (e.g., Cardoso & Thompson, 2010).

Conversely, cultural-specific stressors (e.g., migration stressors, acculturative stress, and perceived discrimination) may negatively influence the psychological health of mothers and their

children (Schwartz et al., 2015) and ultimately affect parenting and familial relationships. Though most Latinxs in the U.S. are U.S.-born (67%, ~40 million), the remaining 33% are foreign-born (Pew Research Center, 2019). Research centered on Latinx nativity status, whether a person is native or foreign-born, has highlighted that the Latinx experience differs tremendously depending on how long they or their families have lived in the U.S., denoted by acculturation and generational status (Salgado de Snyder et al., 2021). Some Latinx immigrants enter the U.S. legally with documentation, whereas others do not possess such documents and become undocumented, which creates the risk of being deported. Migration-specific stressors introduce potentially traumatic experiences related to the migration journey, risk of deportation, loss of familial and social support, and racism and discrimination (Arbona et al., 2010). Acculturative stress can also contribute to pressure in learning a new language while maintaining one's native language, balancing differing cultural values and practices, and cultural brokering between heritage culture and U.S. culture (Marsiglia et al., 2011; Torres et al., 2012). For Latinx women, these stressors and demands may increase the likelihood of experiencing psychological symptoms, impact their overall well-being and stress, and may disrupt traditional gender and family roles, creating stress within the family system (e.g., Lorenzo-Blanco & Cortina, 2013; White et al., 2009).

Maternal Stress

As noted above, Latinx women, specifically mothers, may experience a range of stressors and types of stress. This dissertation will highlight two specific and interrelated types of stress, specifically maternal psychological distress and parenting stress.

Maternal Psychological Distress

Decades of research have documented the inextricable link between the mental health of mothers and their children. When discussing mental health, researchers may reference the presence of a mental/ psychological disorder or the presence of psychological distress. The term psychological distress often refers to non-specific mental or physical symptoms of depression, anxiety, or stress, which may indicate the beginning or presence of a formal mental disorder (Viertiö et al., 2021; American Psychological Association, 2018.) Multiple frameworks on the transmission of mental health disorders and psychological distress from parents to children have been proposed, with many based on the foundational work of Goodman and Gotlib (1999) on maternal depression. Four main risk pathways have empirical support: parental mental health difficulties during the prenatal period, genetic risk, parenting quality, and exposure to other types of stressors such as interparental conflict (see Goodman & Tully, 2006 and Zalewski et al., 2017 for a broader explanation of the four pathways). Newer lines of research have highlighted that those relationships between a child and their parent inherently involve bidirectional and transactional influences (e.g., Mackler et al., 2015; Sameroff & Mackenzie, 2003). Additionally, maternal psychological distress often co-occurs with other factors that may put children's well-being at risk, such as poverty, parental experiences of racism and discrimination, and family instability (e.g., Masarik and Conger, 2017; Spence et al., 2002). For example, investigations into parenting as a risk factor have proposed that it is how a parent's mental health affects the parent's behavior and family functioning that creates risk for children. On average, mothers experiencing psychological stress are more likely to engage in negative parenting practices, have strained family interactions, and have a dysfunctional home environment (Cummings et al., 2020; Goodman et al., 2011).

Research on the mental health of Latinx mothers has found significant associations between mental disorders or psychological distress and factors such as SES, intrafamily conflict, parenting stress, and migration-related stressors, including discrimination (e.g., Hass et al., 2000; Marsiglia, 2011; Shattel et al., 2008). This line of research has also shown that many of these factors are associated with adverse child outcomes and impact children's overall well-being (e.g., Cleary et al., 2018; Flores et al., 2010). To date, there is one systematic review that explores the relationship between maternal depression in Latinx mothers and their young children's socioemotional outcomes (children ages 0-5 years). Harris and Santos (2020) examined multiple mechanistic pathways contributing to this association in their review. For example, one highlighted study within the review, conducted by Palermo and colleagues (2018), found a significant association between maternal mental health problems (quantified using a composite of depression symptoms, parenting distress, and mothers' report of control over their life) and their toddler's socio-behavioral difficulties.

Parenting Stress

Parenting Stress is typically described as parents' negative experiences resulting from a perceived disparity between parental responsibilities and available resources (Abidin, 1995; Deater-Deckard, 1998). As outlined by Deater-Deckard (2008), parenting stress tends to manifest in three concerns: 1) the belief that one is not adequate in their role as a parent, (2) the action of regarding an internal negative quality to the child, and (3) judgement of one's interactions with the child as dysfunctional. Current views also emphasize a multifactorial conception of parenting stress involving characteristics of the parent, child, and context (e.g., Östberg & Hagekull, 2000; Reitman et al., 2002). Decades of research have highlighted an intimate and bidirectional link between maternal stress, maternal psychological stress, and child well-being. For example,

previous research into mechanistic pathways has suggested that parenting stress negatively influences parenting behavior, which has been shown to impact children's development, including socioemotional difficulties (e.g., Anthony et al., 2005; Deater-Deckard, 1998; Liu & Wang, 2015). Other contextual factors also affect a mother's psychological well-being and increase parenting stress, including disruptions in family functioning, reduced social support, and adverse life events.

Maternal Experiences of Racism and Discrimination

As previously noted, maternal psychological distress often occurs with factors such as maternal experiences of racism and discrimination (e.g., Masarik and Conger, 2017; Spence et al., 2002). A growing body of literature highlights how these two factors are intrinsically related and how they may put children's development at risk (Iruka et al., 2022). There is evidence that exposure to vicarious racism, defined by Harrell (2000) as exposure to racism experienced by a family member, friend, or peer, is associated with poor child outcomes, including behavioral problems and psychological distress (Heard-Garris et al., 2018; Quintana & McKown, 2008; Saleem et al., 2020, Zimmerman & Miller-Smith, 2022). Even so, null results have also been found in studies examining the association between vicarious trauma and child outcomes (Heard-Garris et al., 2018).

Inconsistencies in findings point to the need for further research, including a focus on the impact of exposure to specifically maternal experience of racism and discrimination, child mental health outcomes, and a deeper examination of potential pathways of influence. Suggested pathways have included parenting stress, unsupportive or insensitive parenting, and parent mental health (Bécares et al., 2015; Priest et al., 2013; Slopen et al., 2019). While these lines of research have examined parenting stress and mental health as potential mediators or moderators,

it is important to consider maternal stress in the context of racism and discrimination as it relates to child well-being. An interaction test may reveal the extent to which the relationship between maternal stress and child well-being varies as a function of a mother's degree of experience with racism and discrimination. Within the Latinx community, racism and discrimination are often tied to culture-specific stressors, including migration-related stressors and acculturative stress.

Family Functioning and Well-Being

Family functioning refers qualities of the global family environment including, relationships between family members, cohesion, level of conflict or disagreement, and adaptability of the family unit (e.g., Broderick, 1993; Lewandowski et al., 2010; Kerig, et al., 2016). As noted by Lewandowski and colleagues (2016), healthy family functioning occurs in environments where there is cohesion, communication is clear, and roles are well-defined. On the other hand, unhealthy family functioning occurs within a family environment with high levels of intrafamily conflict (interparental and parent-child) and disorganization (e.g., Conger et al., 1994; English et al., 2003). While different theoretical approaches exist to examine family functioning, one fundamental approach is the Family Systems Theory, which sees family members as interdependent, such that individual people's health outcomes are shaped by their family members (Broderick, 1993; Kerig, 2016). As highlighted by Kerig (2016), it is therefore expected that the stress affecting one family member may affect interparental and parent-child relations as well as the whole family system.

Intrafamily conflict

Intrafamily Conflict is often defined as physical violence (e.g., hitting), emotional violence (e.g., degrading), or aggression, and involves at least one family member as a victim and another as a perpetrator (Margolin & Vickerman, 2007). More specifically, it may include

interparental conflict, often referred to as intimate partner violence and parent-child conflict. Decades of research on intrafamily conflict have highlighted relationships between it, parental stress, parental psychological distress, and poorer child well-being (e.g., English et al., 2003; Huth-Bocks et al., 2001; Moore et al., 2007, Jones et al., 2021). For example, Roberts and colleagues (2013) found that in a sample of parents of young children (~50% Latinx), child mental health functioning was significantly associated with family violence exposure and that parental stress partially mediated the relationship between family violence exposure and young children's mental health functioning.

As previously introduced, researchers have highlighted family cohesion, high family support, and familial interdependence as key shared values within the Latinx populations (e.g., Cardoso & Thompson, 2010; Kuhlberg et al., 2010). Research on the relationship between family functioning and Latinx adult health shows that family support is associated with lower levels of psychological distress, including depressive symptoms, and with higher levels of psychological well-being (e.g., Aranda et al., 2001; Rodriguez et al., 2007). Additionally, greater adherence to "familismo" is theorized to buffer Latinxs from poor mental health because of the emphasis on family cohesion and support (Gallo et al., 2009; Hovey, 2000). Moreover, family cohesion appears to buffer children against the negative impact of other family stressors, such as interparental conflict (Davies et al., 2002). Although, it is essential to note that the same emphasis on interconnectedness and "familismo" can also serve as a source of distress in the absence of family resources such as family support and the presence of family risk factors such as intrafamily conflict (Laria & Lewis-Fernández, 2006; Menjívar, 2000).

Child Well-Being in the Context of Economic Hardship

Child well-being represents the whole child, including physical and mental health, socio-emotional development and behavior, cognitive development, and educational achievement (e.g., Anthony et al., 2005; Deater-Deckard, 1998; Goodman et al., 2020). As noted throughout previous sections, research on the impact and relationship between maternal stress and family functioning disruptions often highlight downstream effects, including detriments to child well-being (e.g., Goodman et al., 2020; Jones et al., 2021). Specifically, this refers to elevated internalizing and externalizing behavior problems and child mental health difficulties. While these models typically originated from predominately White samples, evidence suggests associations exist across ethnic-racial groups and in Latinx mother-child dyads.

One model that emphasizes the interconnections among familial stress, parental distress, and child well-being is the Family Stress Model (FSM) (Conger et al., 1994). The FSM emphasizes the role of family economic stress on child outcomes. The original model posits a cascade in which adverse economic conditions and economic pressure within the family lead to increased parental emotional distress, including psychological distress. In turn, parental emotional distress impacts the caregiver relationship and parenting, leading to intrafamily stress and disruptions in child adjustment (Conger et al., 1994). The FSM has evolved into a framework for understanding the family stress process and its potential impact on child well-being. A more recent review of the empirical studies informed by the FSM framework highlights new explanatory pathways and factors that moderate FSM pathways, including parental support, neighborhood adversity, and culture-related stressors (Masarik & Conger, 2017). Frameworks such as the FSM are essential to consider as the literature has shown that whether a child's environment supports or limits their developmental potential is significantly determined by a family's economic situation, whether that is their socioeconomic status (SES) (Letourneau et al.,

2011), income poverty (Spence et al., 2002), or material hardship (Martin et al., 2019; Schenck-Fontaine & Ryan, 2022). SES, which is primarily determined by a combination of social (e.g., parental education level) and economic factors (e.g., income), may influence child development through different avenues, including parental resources, parenting practices, and parental mental health (Letourneau et al., 2011; Kalil & DeLeire, 2004; McLoed & Shanahan, 1993). Income poverty, typically defined by U.S. policymakers as household income below the federal poverty line by household size, heightens the association between maternal psychopathology, depression specifically, and children's socioemotional difficulties (Madigan et al., 2018). While material hardship is closely associated with income poverty, it is a separate construct with unique associations to adverse caregiver and child outcomes (e.g., behavioral difficulties) (Schenck-Fontaine & Ryan, 2022). Material hardship is often defined as difficulty paying for basic needs but also includes food insecurity, medical hardship (no/limited access to needed medical care or a lack of health insurance), and housing hardship (unsafe, unsanitary, or unavailable housing) (Beverly, 2001; Schenck-Fontaine & Ryan, 2022).

As family economic stress presents risks to child development, it is critical to note that in 2019, about half of Hispanic (term used by the U.S. Census Bureau) children under the age of 18 in the U.S. lived in households with income less than 200 percent of the federal poverty line (U.S. Census Bureau, 2020a; U.S. Census Bureau, 2020b). Furthermore, Hispanics living in poverty were 1.5 times more than the general population, although Hispanics comprised 18.7% of the total population. Thus, in this dissertation, material hardship plays a prominent role in understanding the context through which Latinx maternal stress is associated with child outcomes.

The COVID-19 Pandemic

The COVID-19 pandemic exacerbated health disparities, social inequities, and institutional discrimination worldwide (Salgado de Snyder et al., 2021). Overall, U.S. Latinxs have been unduly affected in more ways than the disease outcome because of the historical accumulation of pervasive, unfair, and unjust social inequities that influence their social well-being. U.S. Latinxs have experienced disproportionate COVID-19 morbidity and mortality, financial burdens due to greater levels of underemployment and unemployment, material hardship due to further restricted access to basic needs, including work, education, food, and housing (Center for Disease Control and Prevention [CDC], 2020; Garcia et al., 2021; Pew Research Center, 2020). Within this community, Spanish-speaking Latinxs were at higher risk for exposure to COVID-19 due to socioeconomic conditions that disproportionately place them in frontline jobs and a lack of access to equitable resources and information, which contributed to higher levels of overall stress (Mehring et al., 2021).

While Latinxs represented ~13% of the population of Oregon, in 2021, they accounted for 27% of COVID-19 infections in the state of Oregon (Oregon Health Authority, 2021; U.S. Census Bureau, 2020c) and continued to bear a higher prevalence of underlying conditions, that place them at a higher risk for severe COVID19 disease (Baquero et al., 2020; Poulson et al., 2021). While the COVID-19 pandemic will have widespread health, economic, and psychological consequences, reports indicate that the U.S. Latinx community has been and is particularly vulnerable (Hibel et al., 2021a; Hibel et al., 2021b). In one 2020 survey with a national representative sample, Latinxs reported a higher prevalence of symptoms of anxiety or depressive disorder, COVID–19–related trauma symptoms, increased substance use, and suicidal ideation than non-Latinx Whites or non-Latinx Asian respondents (Czeisler et al., 2020). U.S.

Latinx mothers are navigating the COVID-19 pandemic from their racialized, gendered, and classed positions while caring for children and families. These factors are likely to have a significant psychological toll. Researchers have begun highlighting how the systemic oppression associated with Latinx women's multiple and intersecting identities has contributed to gendered differences in response to the COVID-19 pandemic (Sharma et al., 2020). Specifically, many mothers engage in "motherwork," which includes caregiving, child-focused household labor, and relationship building, all of which are critical emotional labor that sustains family functioning and cohesion (Collins, 2016; Moreira da Silva, 2019; Power, 2020; Vora, 2012). While this "motherwork" typically uplifts and benefits Latinx families and communities (Anzaldúa, 1987; Caballero et al., 2019; Bernal, 1998), this labor is largely unpaid, undervalued, and invisible (Vora, 2012). The COVID-19 pandemic has increased the care burden for mothers, many of whom are experiencing pandemic-related decreases in mental health at higher rates than fathers (Hamel & Salganicoff, 2020; Power, 2020). These difficulties have and will have long-lasting impacts on not only parents but the well-being of their children as well.

Approach

This dissertation will use mixed methods by incorporating of both quantitative and qualitative data. As noted by Tashakkori & Creswell (2007), the original editors of the *Journal of Mixed Methods Research*, mixed methods can be broadly defined as research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a program of inquiry. This dissertation will use mixed methods as this type of research draws on the potential strengths of both qualitative and quantitative methods, which in turn allows researchers to explore diverse perspectives and potentially uncover relationships that exist between the intricate layers of

multidimensional research questions (Greene et al., 1989; Johnson & Onwuegbuzie, 2004; Shorten & Smith, 2017).

The overall aim of this dissertation is to advance the field's understanding of the relationship between maternal stress, family functioning, and child well-being in Latinx mothers who have young children in a national sample of Latinx mothers with young children who participated in the Rapid Assessment of Pandemic Impact on Development–Early Childhood (RAPID-EC) project between April 2020 and April 2022. The RAPID-EC project is an ongoing early childhood and family well-being survey launched in April 2020 in response to the COVID-19 pandemic. The project aims to collect essential information from families with young children across the U.S. to further our understanding of the pandemic’s impact and provide actionable data to key stakeholders to inform immediate and long-term program and policy decisions. The RAPID-EC research team recruited participants on an ongoing basis from across the U.S., and to be eligible had to have at least one child 0- through 5 years old, be over the age of 18 years old, currently live in the U.S., speak English or Spanish fluently, and be willing to be recontacted for follow-up surveys. Once enrolled, participants received follow-up surveys periodically throughout the pandemic, with surveys distributed weekly, then biweekly, and now monthly. Surveys were composed of various question types, including multiple-choice items and open-ended prompts. The project’s design allows the RAPID-EC research team to continuously add participants, collect snapshots of data across time, add survey items based on the changing nature of the pandemic, and assess trends longitudinally. This dissertation is a substudy from the larger data collection efforts in the RAPID-EC project and focuses explicitly on Latinx mothers and their children. Therefore, the dissertation study aims are outlined below.

Dissertation Aims

The first part of this dissertation examines associations among material hardship, maternal stress (parental stress and psychological distress), and child well-being via quantitative data from a nationally drawn sample of Latinx mothers with young children who participated in the RAPID-EC project. The role of intrafamily conflict (interparental and parent-child) and maternal experiences of racism and discrimination in associations will also be examined.

Aim 1. The study's first aim is to examine the relationship between material hardship and maternal stress.

I hypothesize that a higher number of material hardships will be associated with higher levels of maternal stress.

Aim 2. The study's second aim is to examine intrafamily conflict as a mediator, partially explaining the association between maternal stress and child well-being.

I hypothesize that intrafamily conflict will explain a significant portion of the variance between maternal stress and child well-being.

Aim 3. The study's third aim is to test the extent to which the relationship between maternal stress and child well-being varies as a function of mother's experiences with racism and discrimination.

I hypothesize that Latinx mothers' experience of racism and discrimination will exacerbate the relationship between maternal stress and lower child well-being. Mothers who endorse high stress and greater experiences of racism and discrimination will report the lowest score on child well-being compared to mothers with high stress but who report fewer experiences of racism and discrimination. Conversely, lower experiences of racism

and discrimination will mitigate the relationship between maternal stress and child well-being.

The second part of this dissertation explores mothers' lived experiences of stress via qualitative data (i.e., responses to open-ended questions) from a subsample of Latinx mothers from the RAPID-EC project who reside in Oregon. More specifically, mothers' self-reported biggest challenges and concerns and what is helping them the most will be coded using thematic analysis. Moreover, to both complement and potentially extend key quantitative findings, the initial round of coding will focus on factors at the maternal (stressors and support), familial (conflict/stress and cohesion), and child (well-being) levels before extending to other self-reported factors (e.g., financial and childcare availability).

Aim 4. The study's fourth aim is to further contextualize mothers' lived experiences of stress by examining their self-reported greatest challenges and areas of support.

Conceptual Models

Figure 1

Aim 1 – Material Hardship At Baseline Predicting Maternal Stress At Follow Up 1

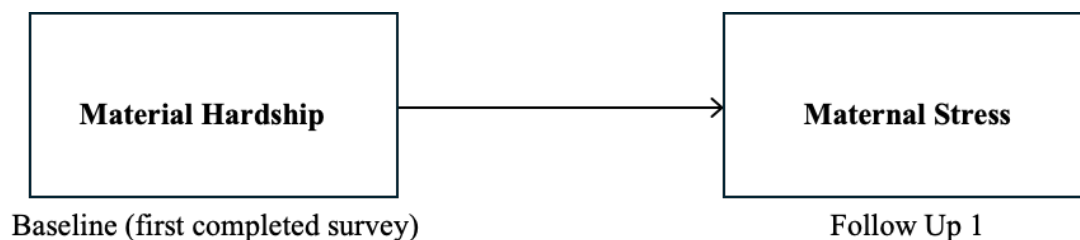


Figure 2

Aim 2 – Maternal Stress At Follow Up 1 Predicting Child Well-Being At Follow Up 2 Via Intrafamily Conflict At A Mid-Point

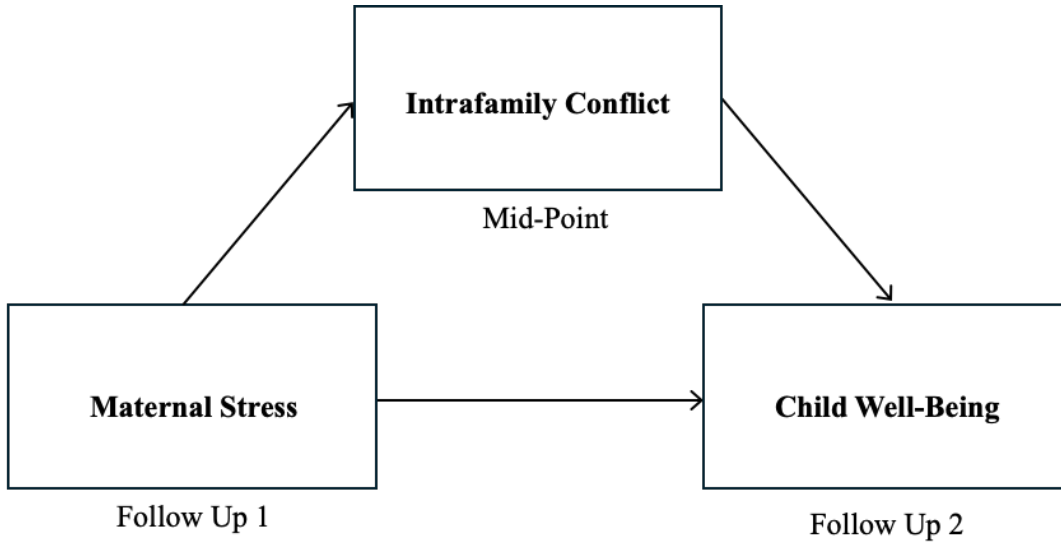
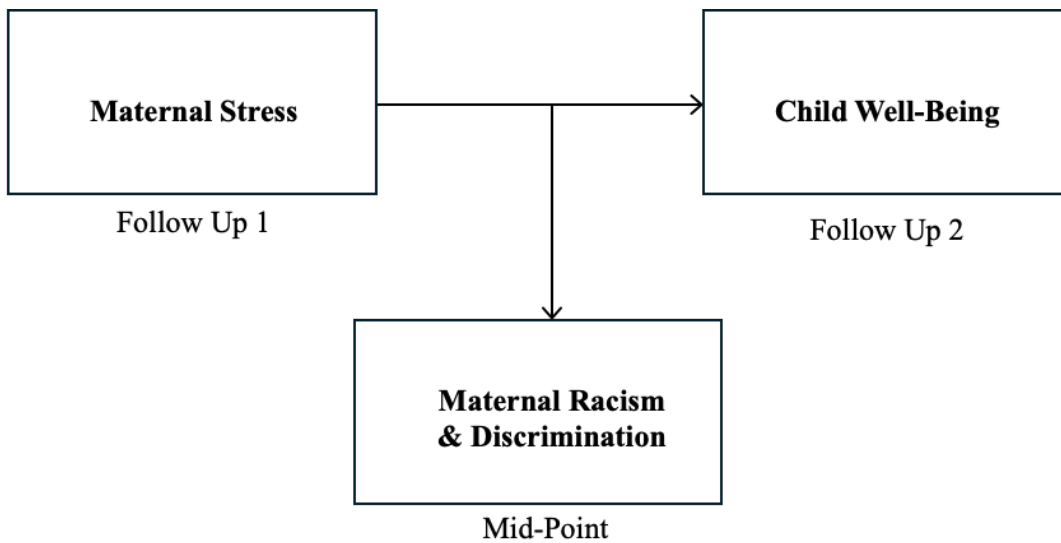


Figure 3

Aim 3 – Maternal Experiences Of Racism And Discrimination At A Mid-Point Moderating The Association Between Maternal Stress At Follow-Up 1 And Child Well-Being At Follow-Up 2



CHAPTER II

METHODS AND MATERIALS

Part 1: Quantitative Aims 1-3

Procedures

This study employed data from the Rapid Assessment of Pandemic Impact on Development–Early Childhood (RAPID-EC) project, an ongoing study that assesses the impact of the pandemic on households with young children across the U.S. with periodic follow-up surveys. The institutional review board at the University of Oregon has approved all the study procedures. Participants were recruited through community organization email listservs, Facebook Ads, and panel services. Eligibility criteria for parents included 1) speaking English or Spanish fluently, 2) being 18 years or older, 3) having at least one child 0- through 5 years old, 4) currently living in the United States, and 5) being willing to be recontacted for follow-up surveys. RAPID-EC sampling included two types of surveys – initial recruitment (i.e., baseline) and multiple ongoing follow-up assessments.

Baseline and follow-up surveys were distributed weekly (April 6, 2020, through July 30, 2020) and then biweekly (July 30, 2020, through November 19, 2020) basis and then monthly (November 19, 2020, to April 27, 2022). During each baseline survey, parents first completed the eligibility screening. Eligible parents continued to answer a set of core questions, provided consent for further follow-up assessments and were enrolled into a participant pool. The goal of each baseline survey was to recruit 500 families using convenience sampling. Then, during follow-up assessments, research assistants randomly selected 2,000 participants from the pool (stratified by race/ethnicity, pre-pandemic poverty level, and region) and invited them to answer

the follow-up survey through emails, with a goal of obtaining 1,000 responses per follow-up survey. Follow-up surveys included core questions and special modules (e.g., family conflict). It is important to note that the RAPID-EC participant pool was not intended to be nationally representative, but the research team made extensive efforts to include more racially/ethnically diverse groups (especially Black and Latinx) families) and lower-income families. Following this sampling strategy, the number and date of follow-up responses vary by family. The survey respondents reported individual and household socio-demographics. The RAPID-EC project team made extensive efforts to manually and systematically inspect all survey responses to detect and remove fraudulent responses. The team identified fraudulent responses by incorporating various strategies, including examining IP addresses, survey duration, responses to attention check questions, and looking for inconsistent data patterns (Liu et al., 2022). For further information about the RAPID-EC team's strategies for identifying fraudulent responses, including the fraud detection protocols they were based on, please reference Liu and colleagues' (2022) paper. Each family received \$5 as an incentive for each completed survey. The project's design allowed for the RAPID-EC research team to continuously add participants, collect snapshots of data across time, add survey items based on the changing nature of the pandemic, and assess trends longitudinally.

Participants

Part one of this dissertation aims to examine associations among material hardship, maternal stress (parental stress and psychological distress), and child well-being via quantitative data from a nationally drawn sample of Latinx mothers with young children who participated in the RAPID-EC project. The role of intrafamily conflict (interparental and parent-child) and maternal experiences of racism and discrimination in associations will also be examined.

The quantitative portion of this dissertation (Part 1) used RAPID-EC data collected between April 6, 2020, and April 27, 2022, and included only respondents who identified as female and Latinx. A total of 805 Latinx mothers who responded to surveys from Week 1 (April 6th, 2020) to Week 93 (March 16th, 2022) formed the full sample (used for Aim 1). Key socio-demographic characteristics of the full sample ($N = 805$) and two subsamples (used for Aim 2 and 3) are described below and presented in Table 1. Total socio-demographic characteristics for all three samples can be found in Appendix A. In the full sample, the number of completed surveys for each mother, including the baseline survey, ranged from 2 to 46 ($M = 7$, $SD = 5.59$). Participants all resided in the U.S., with 12% in the Northeast, 35% in the South, 15% in the Midwest, and 39% in the West. Regarding primary language in the home, 80% reported speaking English, 19% reported speaking Spanish, 0.50% reported speaking another language, and 1% did not report a primary language. Furthermore, 68% ($n=549$) reported being born in the U.S., 23% ($n=188$) reported being born outside the U.S., and 8% ($n=68$) did not report their nativity status. Based on reported household income in 2019, 37% of families lived at or below 200% of the federal poverty level (FPL, calculated based on reported household income in 2019 and household size).

Analyses for the second study aim were based on a subsample of 306 mothers who completed a special module that assessed for family conflict. For this subsample, the number of responses for each mother ranged from 4 to 46, with a mean of 11 ($SD = 6.33$). Additionally, analyses for the third aim were based on a separate subsample of 518 mothers who completed a special module that assessed maternal experiences of racism and discrimination. For this subsample, the number of responses for each mother ranged from 3 to 46, with a mean of 9 ($SD = 5.98$).

Table 1*Socio-Demographics For The Quantitative Full Sample And Subsamples (Abbreviated)*

	Total Sample (Aim 1)		Mediation Sample (Aim 2)		Moderation Sample (Aim 3)	
	N	%	N	%	N	%
Maternal Race						
Native American/Alaska Native (only)	16	2.0	9	2.9	14	2.7
Asian (only)	3	0.4	2	0.7	3	0.6
Black/African American (only)	23	2.9	10	3.3	13	2.5
Native Hawaiian/ Pacific Islander (only)	3	0.4	0	0.0	2	0.4
White (only)	468	58.1	192	62.7	314	60.6
Bi-Racial/Multi-Racial	77	9.6	31	10.1	51	9.8
Other – wrote in Hispanic/ Latino(a)	215	26.7	62	20.3	121	23.4
Maternal Primary Language						
English	642	79.8	245	80.1	415	80.1
Spanish	151	18.8	55	18.0	97	18.7
Other	4	0.5	2	0.6	2	0.4
Did not report	8	1.0	4	1.3	4	0.8
Maternal Nativity Status						
U.S. Born	549	68.2	215	70.3	371	71.6
Foreign Born	188	23.4	76	24.8	119	23.0
Did not report	68	8.4	15	4.9	28	5.4
Family Pre-Pandemic Poverty Level						
At or below 200% FPL	299	37.1	111	36.3	195	37.6
200%–400% FPL	215	26.7	81	26.5	135	26.1
Above 400% FPL	170	21.1	64	20.9	106	20.5
Did not report	121	15.0	50	16.3	82	15.8
Family Structure						
Dual-Parent Household	687	85.3	267	87.3	461	89.0
Non-Dual-Parent Household	88	10.9	33	10.8	44	8.5
Did not report	30	3.7	6	2.0	13	2.5
Number of Children in Home						
1	279	34.7	118	38.6	183	35.3
2	293	36.4	116	37.9	185	35.7
3	141	17.5	39	12.7	84	16.2
4	54	6.7	22	7.2	42	8.1
5+	38	4.7	11	3.6	24	4.7
Region						
Northeast	93	11.6	46	15.0	59	11.4
Midwest	123	15.3	49	16.0	80	15.4
South	278	34.5	89	29.1	170	32.8
West	311	38.6	122	39.9	209	40.3

Measures

Given that the RAPID-EC project was designed to capture numerous domains via the completion of frequent and brief online surveys, the RAPID-EC research team used brief and sometimes modified measured tools to reduce participant fatigue and shorten survey length. When developing surveys, the RAPID-EC research included a combination of items from validated and standardized questionnaires (when validated measures were available) and study-created survey questions (when no validated measure was available). Additional information about the survey questions referenced below can be found in Appendix B).

Material Hardship. Material hardship was assessed with one item adapted from the Institute of Medicine financial strain scale (Institute of Medicine, 2014) - "Which of these needs have been hard to pay for in the past month? Select all that apply". Options included "Food," "Housing," "Utilities (electric, water, trash)," "Healthcare," "Childcare," and "Social and Emotional." Mothers then responded with a "Yes" or "No." Material hardship was calculated by the total number of basic needs that the family had a difficult time paying for (scores ranged from 0 to 6). A higher number would indicate that the family was experiencing greater material hardship.

Maternal Stress. Mothers retrospectively reported their pre-pandemic experience of parenting stress and psychological distress in the initial baseline surveys. Mothers also reported their COVID-19 pandemic maternal distress during the baseline and each follow-up survey. Mother's maternal stress score was a composite of their parenting stress and psychological distress scores. Parenting Stress: Mothers completed a shortened and revised version of the Parenting Stress Index-Short Form (Abidin, 1990). The PSI-SF measures the stress level in the parent-child relationship and is appropriate for use with children aged one month to 12 years.

Three items were derived from the Parenting Stress Index-Short Form and were rated on a 1 to 5 scale (1=strongly disagree, 5=strongly agree), which produced a Total Stress score. Psychological Distress: Mother's psychological distress symptom score was a composite of depressive symptoms, anxiety symptoms, perceived stress, and loneliness. More specifically, two items from the Patient Health Questionnaire-2 (Kroenke & Spitzer, 2002) to assess depressive symptoms, two items from the Generalized Anxiety Disorder 2-item Scale (Kroenke et al., 2007) to assess depressive symptoms, one item developed by Elo and colleagues (2003) to assess perceived stress, and one item from the NIH Toolbox item bank version 2.0 (Gershon et al., 2013) to assess loneliness. Scores on the four constructs were based on different response sets. To ensure that the four constructs were equally weighted in a composite score, scores were transformed to a range of 0-100 using a percentage of the possible maximum total score. Then, an average score across the four constructs was calculated to indicate the total psychological distress symptoms pre-COVID-19.

Intrafamily Conflict. Mother-reported intrafamily conflict was measured using three items from a short form of the revised Conflict Tactics Scale (CTS) (Straus & Douglas, 2004) and four items from the Parent-Child Conflict Tactics Scales (CTSPC) (Straus et al., 1996), which measure intrafamily conflict and violence, both at the level of interparental conflict (CTS) and parent-child conflict (CTSPC). Raw scores were transformed to a range of 0-100 using a percentage of the possible maximum total score to ensure that the two constructs were equally weighted in a composite score. Then, an average score across both constructs was calculated to indicate the total intrafamily conflict.

Maternal Experiences of Racism and Discrimination. Mothers reported their experience of racism and discrimination via a study-created questionnaire. RAPID-EC created

the questionnaire in partnership with the Researchers Investigating Sociocultural Equity and Race (RISER) Network from Boston University (co-founder Stephanie M. Curenton) and the University of North Carolina at Chapel Hill (co-founder Iheoma U. Iruka). The questionnaire examines parents' experiences of racism, racial discrimination, and racial trauma (Iruka et al., 2023). As described in detail by Iruka and colleagues (2023), the study-created questionnaire includes items from adapted versions of the Major Experiences of Discrimination (Williams et al., 2008) and the Telephone-Administered Perceived Racism Scale (Vines et al., 2001). Items produce a total score, with higher scores indicating greater experiences of racism and discrimination.

Child Well-being. Child well-being was assessed using mothers' reported child behavioral problems. Children's fear/anxiety (internalizing) and fussiness/defiance (externalizing) were assessed using two items from the Child Behavior Checklist for Ages 1.5-5 (Achenbach, 2001). Items produce a total score, with higher scores indicating greater child behavioral problems.

Data Analytic Plan

First, the Statistical Package for Social Sciences (SPSS) version 29.0.0.0 (IBM Corporation, Somers, New York 2022) was used to analyze participants' socio-demographic characteristics and zero-order correlations to examine associations among study variables. Means, standard deviations, and scale reliability will be provided for all study variables. Before inclusion, potential covariates were examined, including the number of children in the home, family structure (dual or single-parent household), maternal nativity status (U.S. vs foreign-born), and federal poverty level. For hypothesis 1, a linear regression model was conducted to examine the association between material hardship at baseline and maternal stress at follow-up 1

using the full sample, $N = 805$. For hypothesis 2, mediation analyses were conducted to test the indirect effects of maternal stress at follow-up 1 on changes in children's well-being outcomes at follow-up 2 via intrafamily conflict at a midpoint using a subsample ($n = 306$). Lastly, for hypothesis 3, moderation analyses were conducted to test if the relationship between maternal stress at follow-up 1 and child well-being follow-up 2 varies at high versus low levels of mothers' experience of racism and discrimination at a midpoint using a separate subsample ($n = 518$). Hayes's (2013) regression-based approach to conducting mediation and moderation via his SPSS PROCESS macro guided analyses for hypotheses 2 and 3.

Part 2: Qualitative Aim 4

Part two of this dissertation explored mothers' lived experiences of stress via qualitative data (i.e., responses to open-ended questions) from a subsample of Latinx mothers from the RAPID-EC project who reside in Oregon. More specifically, mothers self-reported their greatest challenges and concerns, and what was helping them were characterized in order to identify themes and patterns across mothers.

Participants

Part two identified a subsample of Latinx mothers from part one of this dissertation. Specifically, responses from mothers who met the following inclusion criteria were examined: they identify as Hispanic/Latino(a), completed a baseline survey between April 2020 and April 2022, lived in the state of Oregon at baseline, are fluent in English or Spanish, and gave a response to at least one open-ended question. A total of 40 mothers met the inclusion criteria. Key socio-demographic characteristics of the qualitative sample ($N = 40$) are described below and presented in Table 2. All socio-demographic characteristics for the qualitative sample can be found in Appendix C. Of those 40 mothers, 82.5% ($n=33$) reported a primary language of

English, while 17.5% (n=7) reported a primary language of Spanish. In terms of mothers' nativity status, 67.5% (n=27) reported being born in the U.S., 27.5% (n=11) reported being born outside the U.S., and 5% (n=2) did not report their nativity status. Additionally, 43% reported living at or below 200% of the federal poverty level (FPL, based on their 2019 annual income and household size) before the start of the COVID-19 pandemic.

Measures

As previously noted, RAPID-EC questionnaires were composed of various question types, including multiple-choice items and open-ended questions. Rather than including open-ended questions from standardized questionnaires, the RAPID-EC project team created questions aimed at gathering essential information from caregivers about their experiences navigating the COVID-19 pandemic and their beliefs about how the pandemic impacted them, their children, and their families. Open-ended questions were incorporated into the surveys to allow caregivers to describe their experiences in their own words and report anything missed by the study's questionnaires.

Part two of this dissertation focused exclusively on Oregonian Latinx mothers' responses to two open-ended questions (included below).

- 1) *What are the biggest challenges and concerns for you and your family right now?*
- 2) *What is helping you and your family the most right now?*

Focusing on these two questions allowed for further contextualizing mothers' lived experiences of stress, noting whether mothers named and described stressors and supports at the maternal, familial, and child levels. These three levels were essential as the key variables in Part One of this dissertation also centered on maternal factors, family functioning, and child well-

being. These parallel and complementary factors allowed a more thorough investigation of potential patterns/overlaps across the two types of data, quantitative and qualitative.

Table 2

Socio-Demographics For The Qualitative Sample (Abbreviated)

	N	%
Maternal Race		
Native American /Alaska Native (only)	2	5
Asian (only)	0	0
Black/African American (only)	2	5
Native Hawaiian/ Pacific Islander (only)	0	0
White (only)	19	47.5
Bi-Racial/Multi-Racial	4	10
Other – wrote in Hispanic/ Latino(a)	13	32.5
Maternal Primary Language		
English	33	82.5
Spanish	7	17.5
Maternal Nativity status		
U.S. Born	27	67.5
Foreign Born	11	27.5
Did not report	2	5
Family Pre-Pandemic Poverty Level		
At or below 200% FPL	17	42.5
200%–400% FPL	13	32.5
Above 400% FPL	9	22.5
Did not report	1	2.5
Family Structure		
Dual-Parent Household	35	87.5
Non-Dual-Parent Household	4	10
Did not report	1	2.5
Number of Children in Home		
1	12	30
2	11	27.5
3	11	27.5
4	4	10
5	2	5

Data Analytic Plan

The Statistical Package for Social Sciences (SPSS) version 29.0.0.0 (IBM Corporation, Somers, New York 2022) was used to analyze participants' socio-demographic characteristics. Data analytic methods informed by Braun and Clark's (2006) phases of thematic analysis, a systematic and iterative approach to help patterns in the data to be discovered and identified, guided coding, and data reduction. Publications by Braun and Clark (2006, 2012; Clarke & Braun, 2017) highlight vital steps for using thematic analyses, which generally include familiarization with the data, the generation of codes, coding data, generating themes, reviewing and then defining themes, and locating examples. Based on Braun and Clark's broader guidelines, this dissertation writer followed a semi-iterative process consisting of multiple steps, which are detailed below.

First, this dissertation writer familiarized herself with the data by reading through all responses to the two open-ended questions without doing any coding. As part of step one, any responses written in Spanish were translated by this dissertation writer, a native Spanish speaker. For the second step, this dissertation writer re-read the data to identify broad constructs within which initial codes could be generated. This dissertation writer then consulted the literature on maternal stressors and supports as well as other publications that included data from the RAPID-EC projects (Liu & Fisher, 2022; Liu et al., 2022a; Liu et al., 2022b; Zalewski et al., 2023). This literature review was followed by an appraisal of discussions from multiple meetings attended as part of the RAPID-EC Latine Working Group, a group of multidisciplinary scholars who are experts in Latinx caregivers, families, and children. The third step involved creating initial codes (see Table 3), a codebook to capture emerging themes (e.g., maternal, familial, and child factors), and then coding of all responses. Following the preliminary coding, Step 4 began with a

discussion with Dr. Zalewski, the dissertation writer's advisor and dissertation chair, centered on reviewing initially identified themes and considering them in relation to key study variables used in the quantitative portion of this dissertation. After multi-session discussions, it was determined that using themes that matched the relevant critical constructs of the quantitative work was appropriate as these themes appropriately grouped and described the variation of responses to open-ended questions provided by mothers. Specifically, these are (1) maternal factors, (2) family functioning, (3) child well-being, (4) financial factors, (5) culturally relevant factors, and (6) additional concerns or supports. While these themes captured open-ended responses, it was determined that within each theme, there were some apparent subthemes, likely stemming from the fact that the themes listed are broad. Given this qualitative work's descriptive goals, it is also essential to include subthemes. The fifth step led to creating a final codebook for each open-ended question (see Table 4 and Table 5), which was followed by coding all open-ended responses. Lastly (Step 6), examples were located by themes and sub-themes.

Key notes about the codebook – As subthemes varied slightly based on the prompt, each open-ended question (i.e., challenges/ hardships and most helpful) had its final coding list. It is important to note that while "maternal experiences of racism and discrimination" is a central construct in the quantitative work, final analyses revealed that no responses were coded as this construct. Therefore, the construct of "maternal experiences of racism and discrimination" was removed from the final codebook for open-ended question one (challenges and concerns). A theme of "Culturally Relevant Factors" with subthemes of "familismo" and "social and community support" was included in the final codebook for open-ended question two (most helpful) as initial coding of the data revealed that multiple responses referenced these values. Moreover, a theme of "Additional Concerns" or "Additional Supports" was also included in the

final codebook as initial coding of the data also revealed patterns in the responses outside of the key constructs (e.g., concerns about the availability of childcare and school). Finally, it is essential to note that responses to open-ended questions varied in length from one word to multiple sentences and that any response could be assigned more than one code. For example, the response to open-ended question one (challenges and concerns) outlined below was assigned three codes, which are included in the brackets.

"When we will get vaccinated [maternal stress - psychological distress], when will our 15 month old get vaccinated [additional concerns – COVID health & safety], juggling work and caring for our child without outside help" [maternal-stress – parenting demands]" (ID # 2).

Table 3

Initial Codes for Qualitative Data

Theme
Child Well-Being
Culturally Relevant Factors
Family Functioning
Financial Factors
Maternal Factors
Maternal Experiences of Racism/ Discrimination
Additional Concerns or Supports

Table 4*Open-Ended Question One (Challenges/Concerns) Codebook*

Theme	Sub-theme
Maternal Factors (Stress)	<ul style="list-style-type: none"> ○ Parenting demands ○ Psychological distress
Family Functioning	<ul style="list-style-type: none"> ○ Familial relationships
Child Well-Being	---
Financial Factors	<ul style="list-style-type: none"> ○ Employment concerns ○ Material hardship
Additional Concerns	<ul style="list-style-type: none"> ○ Childcare and school – availability of and impact of closures ○ COVID-19 health and safety ○ Physical activity or time outdoors – lack of

Table 5*Open-Ended Question Two (Most Helpful) Codebook*

Theme	Sub-theme
Maternal Factors (Support and Coping)	<ul style="list-style-type: none"> ○ Mindset, skills, and psychological supports
Family Functioning	<ul style="list-style-type: none"> ○ Family cohesion and support ○ Routines ○ Interparental relationship
Child Well-Being	---
Financial Factors	<ul style="list-style-type: none"> ○ Government aid ○ Financial security ○ Employment
Culturally Relevant Factors	<ul style="list-style-type: none"> ○ Familismo ○ Social and community support
Additional Supports	<ul style="list-style-type: none"> ○ Physical activity or time outdoors – availability ○ Childcare and school – availability ○ COVID-19 health and safety ○ Nothing

CHAPTER III
RESULTS

Part 1: Quantitative

Aim 1 Results

Preliminary Analyses. First, Pearson bivariate correlations were conducted to confirm that creating a composite variable for maternal stress was appropriate. Maternal reports of depression, anxiety, stress, loneliness, and total parenting stress were moderately to highly correlated at baseline (r 's = 0.40 - 0.70, $p < .001$) and follow-up 1 (r 's = 0.44 - 0.68, $p < .001$), and therefore a maternal stress composite variable was used for further analyses. Bivariate correlations for the maternal stress at follow-up 1 composite variable are presented in Table 6.

Table 6

Aim 1 - Maternal Stress at Follow Up 1 Bivariate Pearson's Correlations

	Depression	Anxiety	Stress	Loneliness	Parenting Stress
Depression	1				
Anxiety	.683**	1			
Stress	.606**	.699**	1		
Loneliness	.533**	.460**	.438**	1	
Parenting Stress	.464**	.480**	.489**	.453**	1

† $p < .1$, * $p < .05$, ** $p < .01$ n = 805

Covariate Testing. Family structure (dual or single-parent household), maternal nativity status (U.S. vs. foreign-born), number of children in the home, and federal poverty level were tested as potential covariates. These variables were selected to be tested as potential covariates based on past literature due to their independent association with maternal stress in previous

studies. Independent sample t-tests were conducted to examine whether maternal stress at follow-up 1 significantly differed depending on family structure and maternal nativity status. Maternal stress at follow-up 1 was not significantly different in mothers in dual-parent households ($M = 50.56$, $SD = 20.25$) when compared to mothers in single-parent households ($M = 54.14$, $SD = 22.63$), $t(773) = -1.54$, $p = .124$. Maternal stress at follow-up 1 was not significantly different in mothers born in the U.S. ($M = 37.99$, $SD = 24.79$) when compared to mothers born outside of the U.S. ($M = 37.32$, $SD = 27.48$), $t(569) = -.27$, $p = .786$. One-way analysis of variance tests were conducted to examine whether maternal stress at follow-up 1 was significantly different depending on the number of children in the home (1, 2, 3, 4, 5, 6, 7, 8+) and federal poverty level (0-200%, 201-400%, >401%). Maternal stress was not significantly different depending on the number of children in the home, $F(7,797) = 1.83$, $p = .079$. Maternal stress was not significantly different depending on the federal poverty level, $F(2, 681) = 1.73$, $p = .177$. Given that there were no significant associations between maternal stress at follow-up 1 and the four potential covariates (family structure, maternal nativity status, the number of children in the home, and federal poverty level), these potential covariates were not included in the models for Aim 1.

The means, standard deviations, and correlation coefficients of the main variables for Aim 1 (material hardship at baseline, maternal stress at baseline, maternal stress at follow-up 1) and potential covariates (family structure, maternal nativity status, number of children in the home, and federal poverty level) are presented in Table 7. All main variables for Aim 1 were significantly correlated in expected directions (r 's = 0.17 - 0.71, $p < .001$).

Table 7*Aim 1 - Material Hardship and Maternal Stress Bivariate Pearson's Correlations*

	Material Hardship base	Maternal Stress base	Maternal Stress f/u1	Number Children in Home	Maternal Nativity Status	Family Structure	Federal Poverty Level
Material Hardship base	1						
Maternal Stress base	.208**	1					
Maternal Stress f/u1	.172**	.714**	1				
Number Children in Home	.134**	0.057†	0.039	1			
Maternal Nativity Status	-.006	0.071†	0.043	0.045	1		
Family Structure	.159**	0.04	0.055	-.039	0.026	1	
Federal Poverty Level	-.308**	-.045	-.048	-.254**	0.03	-.181	1
Mean	1.156	53.520	51.175	2.129			
SD	1.146	20.695	20.480	1.180			

† $p < .1$, * $p < .05$, ** $p < .01$ n = 805

Hypothesis Testing. For hypothesis 1, a linear regression model was conducted to examine the association between material hardship at baseline and maternal stress at follow-up 1 using the full sample (N = 805). In order to ensure that the association between material hardship at baseline and maternal stress at follow-up 1 was not due to changes in maternal stress over time, the linear regression model first included maternal stress at baseline as a covariate. The results of the regression indicated that the overall model explained 50.9% of the variance in

maternal stress at follow-up 1, $R^2 = .509$, $F(2, 801) = 416$, $p < .001$. Material hardship at baseline did not significantly predict maternal stress at follow-up 1 ($B = .345$, 95%CI $[-.352, 1.042]$, $t = .972$, $p = .331$) while controlling for maternal stress at baseline. Maternal stress at baseline significantly predicted maternal stress at follow-up 1 ($B = .703$, 95%CI $[.654, .752]$, $t = 27.995$, $p < .001$). Given that maternal stress at baseline was highly correlated with maternal stress at follow-up 1 ($r = .714$, $p < .001$), the regression was then rerun without maternal stress at baseline as a covariate in order to avoid problems with multicollinearity. The results of the regression indicated that the model explained 3% of the variance in maternal stress at follow-up 1, $R^2 = .030$, $F(1, 802) = 24.448$, $p < .001$. Material hardship at baseline significantly predicted maternal stress at follow-up 1 ($B = 2.413$, 95%CI $[1.455, 3.371]$, $t = 4.944$, $p < .001$).

Aim 2 Results – Intrafamily Conflict

Preliminary Analyses. First, Pearson bivariate correlations were conducted to confirm that creating a composite variable for intrafamily conflict, maternal stress, and child well-being was appropriate in this subsample. Maternal reports of interparental conflict and parent-child conflict were moderately correlated ($r = 0.59$, $p < .001$), and therefore, an intrafamily conflict composite variable was used for further analyses. Maternal reports of depression, anxiety, stress, loneliness, and total parenting stress were moderately to highly correlated at follow-up 1 (r 's = $0.42 - 0.69$, $p < .001$), and therefore a maternal stress composite variable was used for further analyses. Bivariate correlations for the maternal stress at follow-up 1 composite variable used in Aim 2 are presented in Table 8. Maternal reports of children's fear/anxiety and fussiness/defiance were moderately correlated at follow-up 1 ($r = 0.48$, $p < .001$). and follow-up 2 ($r = 0.45$, $p < .001$), and therefore a child well-being composite variable was used for further analyses.

Table 8

Aim 2 - Maternal Stress at Follow-Up 1 Bivariate Pearson's Correlations (Intrafamily Conflict)

	Depression	Anxiety	Stress	Loneliness	Parenting Stress
Depression	1				
Anxiety	.670**	1			
Stress	.596**	.685**	1		
Loneliness	.499**	.450**	.424**	1	
Parenting Stress	.526**	.520**	.511**	.454**	1

† $p < .1$, * $p < .05$, ** $p < .01$ n = 306

Covariate Testing. Family structure (dual or single-parent household), maternal nativity status (U.S. vs. foreign-born), number of children in the home, and federal poverty level were tested as potential covariates. These variables were selected to be tested as potential covariates based on past literature due to their independent association with maternal stress in previous studies. Independent sample t-tests were conducted to examine whether maternal stress at follow-up 1 significantly differed depending on family structure and maternal nativity status. Maternal stress at follow-up 1 was not significantly different in mothers in dual-parent households ($M = 36.79$, $SD = 25.49$) when compared to mothers in single-parent households ($M = 43.18$, $SD = 25.79$), $t(290) = -1.36$, $p = .177$. Maternal stress at follow-up 1 was not significantly different in mothers born in the U.S. ($M = 37.84$, $SD = 24.48$) when compared to mothers born outside of the U.S. ($M = 35.08$, $SD = 28.01$), $t(281) = -.80$, $p = .42$. One-way analysis of variance tests were conducted to examine whether maternal stress at follow-up 1 was significantly different depending on the number of children in the home (1, 2, 3, 4, 5, 6, 7, 8+) and federal poverty level (0-200%, 201-400%, >400%). Maternal stress was not significantly

different depending on the number of children in the home, $F(7, 290) = 1.53, p = .157$. Maternal stress was not significantly different depending on the federal poverty level, $F(2, 245) = 2.62, p = .075$. Given that there were no significant associations between maternal stress at follow-up 1 and the four potential covariates (family structure, maternal nativity status, the number of children in the home, and federal poverty level), these potential covariates were not included in the models for Aim 2.

The means, standard deviations, and correlation coefficients of the main variables for Aim 2 (maternal stress at follow-up 1, intrafamily conflict at a midpoint, child well-being follow-up 1, and child well-being follow-up 2) and potential covariates (family structure, maternal nativity status, number of children in the home, and federal poverty level) are presented in Table 9. Maternal stress at follow-up 1 was significantly correlated in the expected direction with child well-being at follow-up 1 ($r = .44, p < .001$), child well-being follow-up 2 ($r = .40, p < .001$), and intrafamily conflict at a midpoint ($r = .12, p = .04$). Child well-being at follow-up 1 was significantly correlated in the expected direction with child well-being at follow-up 2 ($r = .54, p < .001$). Intrafamily conflict at the midpoint was not significantly correlated with child well-being at follow-up 1 ($r = 0.047, p = .417$) or follow-up 2 ($r = 0.036, p = .536$).

Table 9*Aim 2 - Bivariate Pearson's Correlations Between Variables of Interest*

	Mat Stress f/u1	Child Well- Being f/u1	Child Well- Being f/u2	Intrafa -mily Confli- ct mid	Num Child in Home	Mat Nativi ty Status	Family Structu -re	Feder al Pover ty Level
Maternal Stress f/u1	1							
Child Well-Being f/u1	.441**	1						
Child Well-Being f/u2	.404**	.541**	1					
Intrafamily Conflict midpoint	.118*	0.047	0.036	1				
Number Children in Home	0.058	-.001	0.004	0.032	1			
Maternal Nativity Status	0.024	0.012	0.048	0.100†	-0.05	1		
Family Structure	0.012	0.042	0.079	-.091	-.001	-.058	1	
Federal Poverty Level	-.112†	-0.029	-.065	-.064	-.284**	0.018	-.182**	1
Mean	50.661	38.494	37.933	1.644	2.016			
SD	20.453	27.227	25.848	1.446	1.147			

† $p < .1$, * $p < .05$, ** $p < .01$

n = 306

Hypothesis Testing. For hypothesis 2, mediation analyses were conducted to test the indirect effects of maternal stress at follow-up 1 on child well-being at follow-up 2 via intrafamily conflict at a midpoint while controlling for child well-being at follow-up 1 using a subsample (n = 306). Given that maternal stress at follow-up 1 was correlated with child well-being at follow-up 2 ($r = .40, p < .001$), as well as intrafamily conflict ($r = .12, p = .04$), it was

plausible to test the indirect path of maternal stress at follow-up 1 on child well-being at follow-up 2 through intrafamily conflict at the midpoint using bootstrapping analyses. When controlling for child well-being at follow-up 1, the unstandardized direct effect of maternal stress at follow-up 1 on child well-being at follow-up 2 was significant ($B = 0.262, t(294) = 3.91, p < .001$).

There was not a significant effect of maternal stress at follow-up 1 on intrafamily conflict at a midpoint while controlling for child well-being at follow-up 1 ($B = .0082, t(295) = 1.82, p = .070$). There was also not a significant effect of intrafamily conflict at a midpoint on child well-being at follow-up 2 while controlling for child well-being at follow-up 1 ($B = -.3608, t(294) = -.42, p = .678$). The unstandardized indirect effect of maternal stress at follow-up 1 on child well-being at follow-up 2 via intrafamily conflict at the midpoint while controlling for child well-being at follow-up 1 was not significant using a 95% confidence interval based on 5,000 bootstrap samples ($B = -.003, 95\%CI = [-.0209, .0155]$). Given that child well-being at follow-up 1 was moderately correlated with child well-being at follow-up 2 ($r = .541, p < .001$), mediation analyses were rerun without child well-being at follow-up 1 as a covariate. Without controlling for child well-being at follow-up 1, the unstandardized direct effect of maternal stress at follow-up 1 on child well-being at follow-up 2 was significant ($B = 0.5085, t(295) = 7.57, p < .001$).

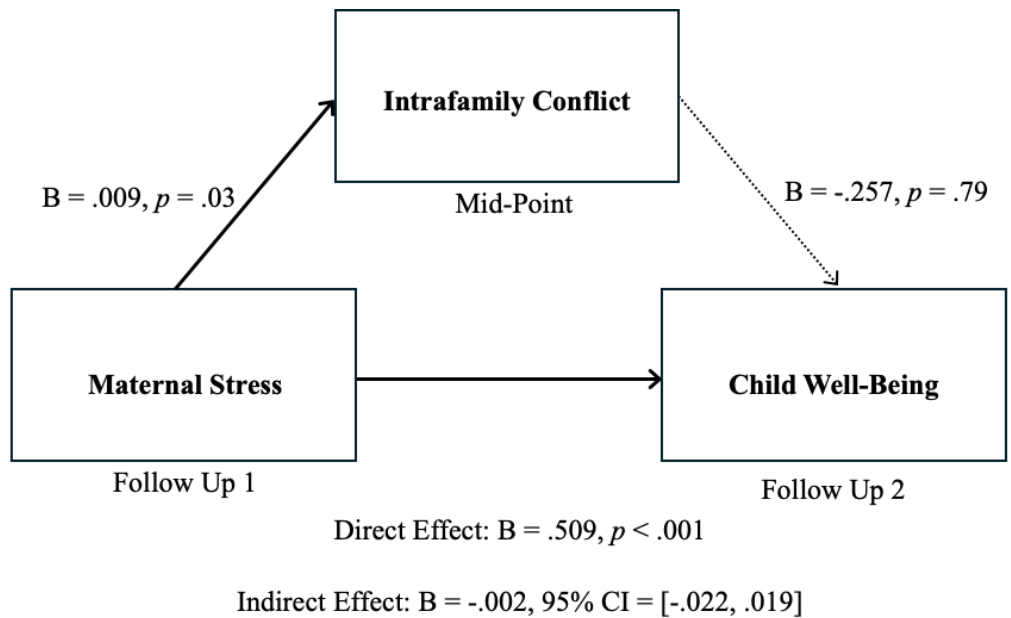
There was a significant effect of maternal stress at follow-up 1 on intrafamily conflict at a midpoint ($B = .0087, t(296) = 2.15, p = .033$). There was not a significant effect of intrafamily conflict at a midpoint on child well-being at follow-up 2 ($B = -.2568, t(295) = -.27, p = .789$).

The unstandardized indirect effect of maternal stress at follow-up 1 on child well-being at follow-up 2 via intrafamily conflict at the midpoint was not significant using a 95% confidence interval based on 5,000 bootstrap samples ($B = -.0022, 95\%CI = [-.0219, .0194]$). Contrary to hypothesis 2, intrafamily conflict at the midpoint was not a significant mediator of the

association between maternal stress at follow-up 1 and child well-being at follow-up 2 (Figure 4).

Figure 4

Maternal Stress At Follow-Up 1 Predicting Child Well-Being At Follow-Up 2 Via Intrafamily Conflict At A Mid-Point



Note: Mediation model showing non-significant mediation. Solid line represents significant pathway, dotted line represents non-significant pathway, B = unstandardized regression coefficient, CI = confidence interval based on 5,000 bootstrap samples.

Aim 3 Results - Maternal Experiences of Racism and Discrimination

Preliminary Analyses. First, Pearson bivariate correlations were conducted to confirm that creating a composite variable for maternal stress and child well-being was appropriate for this subsample. Maternal reports of depression, anxiety, stress, loneliness, and total parenting

stress were moderately to highly correlated at follow-up 1 (r 's = 0.44 - 0.69, $p < .001$), and therefore a maternal stress composite variable was used for further analyses. Bivariate correlations for the maternal stress at follow-up 1 composite variable used in Aim 3 are presented in Table 10. Maternal reports of children's fear/anxiety and fussiness/defiance were moderately correlated at follow-up 1 ($r = 0.44$, $p < .001$) and follow-up 2 ($r = 0.39$, $p < .001$), and therefore a child well-being composite variable was used for further analyses.

Table 10

Aim 3 - Maternal Stress at Follow-Up 1 Bivariate Pearson's Correlations (Racism & Discrimination)

	Depression	Anxiety	Stress	Loneliness	Parenting Stress
Depression	1				
Anxiety	.682**	1			
Stress	.606**	.685**	1		
Loneliness	.522**	.447**	.442**	1	
Parenting Stress	.530**	.514**	.515**	.447**	1

† $p < .1$, * $p < .05$, ** $p < .01$ n = 518

Covariate Testing. Family structure (dual or single-parent household), maternal nativity status (U.S. vs. foreign-born), number of children in the home, and federal poverty level were tested as potential covariates. These variables were selected to be tested as potential covariates based on past literature due to their independent association with maternal stress in previous studies. Independent sample t-tests were conducted to examine whether maternal stress at follow-up 1 significantly differed depending on family structure and maternal nativity status. Maternal stress at follow-up 1 was not significantly different in mothers in dual-parent

households ($M = 37.01$, $SD = 25.40$) when compared to mothers in single-parent households ($M = 42.73$, $SD = 29.41$), $t(490) = -1.39$, $p = .165$. Maternal stress at follow-up 1 was not significantly different in mothers born in the U.S. ($M = 37.60$, $SD = 24.89$) when compared to mothers born outside of the U.S. ($M = 35.58$, $SD = 27.50$), $t(475) = -.74$, $p = .459$. One-way analysis of variance tests were conducted to examine whether maternal stress at follow-up 1 was significantly different depending on the number of children in the home (1, 2, 3, 4, 5, 6, 7, 8+) and federal poverty level (0-200%, 201-400%, >401%). Maternal stress was not significantly different depending on the number of children in the home, $F(7,497) = 2.00$, $p = .054$. Maternal stress was not significantly different depending on the federal poverty level, $F(2, 422) = 1.87$, $p = .156$. Given that there were no significant associations between maternal stress at follow-up 1 and the four potential covariates (family structure, maternal nativity status, the number of children in the home, and federal poverty level), these potential covariates were not included in the models for Aim 3.

The means, standard deviations, and correlation coefficients of the main variables for Aim 3 (maternal stress at follow-up 1, maternal experiences of racism and discrimination at the midpoint, child well-being follow-up 1, and child well-being follow-up 2) and potential covariates (family structure, maternal nativity status, number of children in the home, and federal poverty level) are presented in Table 11. All main variables for Aim 3 were significantly correlated in expected directions (r 's = 0.22 - 0.53, $p < .001$).

Table 11*Aim 3 - Bivariate Pearson's Correlations Between Variables of Interest*

	Maternal Stress f/u1	Child Well- Being f/u1	Child Well- Being f/u2	Mat Exp of Racism & Discrim	Number Children in Home	Maternal Nativity Status	Family Structure	Federal Poverty Level
Maternal Stress f/u1	1							
Child Well- Being f/u1	.439**	1						
Child Well- Being f/u2	.376**	.531**	1					
Mat Exp of Racism & Discrim	.350**	.285**	.222**	1				
Number Children in Home	0.063	-.001	0.007	0.016	1			
Maternal Nativity Status	0.056	0.003	0.034	-.018	0.059	1		
Family Structure	0.075†	0.063	0.063	.087*	0.005	0.028	1	
Federal Poverty Level	-.061	-.058	-.086†	-0.048	-.272**	0.004	-.167**	1
Mean	51.473	37.778	37.756	9.131	2.137			
SD	20.478	26.323	25.842	11.109	1.207			

† $p < .1$, * $p < .05$, ** $p < .01$

n = 518

Hypothesis Testing. For hypothesis 3, moderation analyses were conducted to test if the relationship between maternal stress at follow-up 1 and child well-being at follow-up 2 varied at

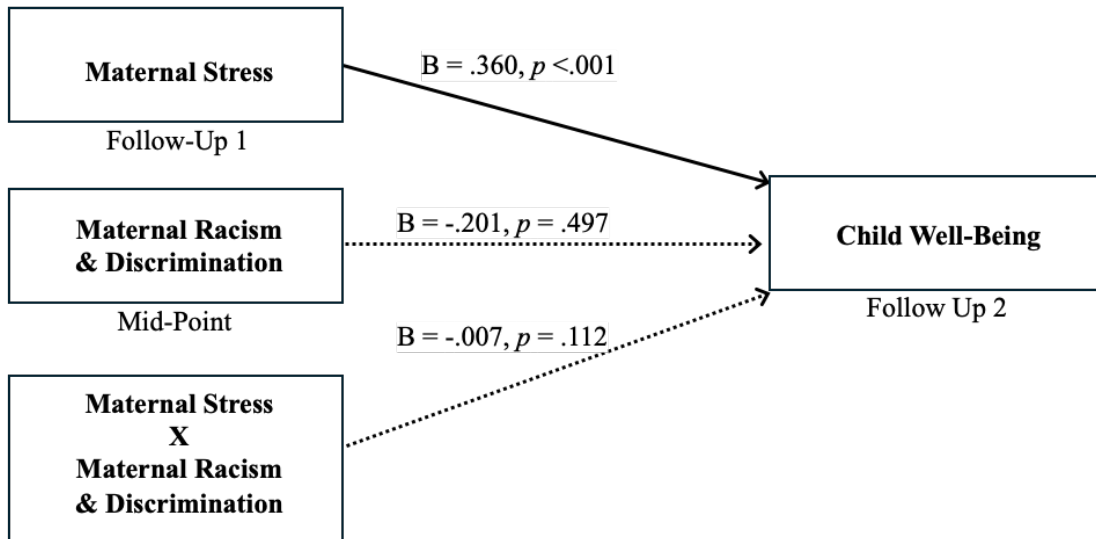
high versus low levels of mothers' experiences of racism and discrimination at a midpoint using a separate subsample ($n = 505$). A moderation test was run with maternal stress at follow-up 1 as the predictor, child well-being at follow-up 2 as the dependent variable, and maternal experiences of racism and discrimination at a midpoint as a moderator while controlling for child well-being at follow-up 1. The results of the moderation analyses indicated that the model significantly explained 31% of the variance in child well-being at follow-up 2, $R^2 = .311$, $F(4, 500) = 56.49$, $p < .001$. There was a significant main effect of maternal stress at follow-up 1 on child well-being at follow-up 2, $B = .1713$, 95%CI [0.04, .30], $t(500) = 2.62$, $p = .009$. There was not a significant main effect of maternal experiences of racism and discrimination at a midpoint on child well-being follow-up 2, $B = -.1538$, 95%CI [-.68, .37], $t(500) = -.58$, $p = .5658$. There was not a significant interaction of maternal stress at follow-up 1 and maternal experiences of racism and discrimination on child well-being at follow-up 2, $B = .0043$, 95%CI [.36, .52], $t(500) = 1.02$, $p = .308$. Given that child well-being at follow-up 1 was moderately correlated with child well-being at follow-up 2 ($r = .531$, $p < .001$), moderation analyses were rerun without child well-being at follow-up 1 as a covariate.

A moderation test was run with maternal stress at follow-up 1 as the predictor, child well-being at follow-up 2 as the dependent variable, and maternal experiences of racism and discrimination at a midpoint as a moderator without controlling for child well-being at follow-up 1. The results of the moderation analyses indicated that the model significantly explained 16% of the variance in child well-being at follow-up 2, $R^2 = .155$, $F(3, 501) = 30.66$, $p < .001$. There was a significant main effect of maternal stress at follow-up 1 on child well-being at follow-up 2, $B = .3597$, 95%CI [.22, .50], $t(501) = 5.17$, $p < .001$. There was not a significant main effect of maternal experiences of racism and discrimination at a midpoint on child well-being follow-up 2,

$B = -.2012$, 95%CI $[-.78, .38]$, $t(501) = -.68$, $p = .497$. There was not a significant interaction of maternal stress at follow-up 1 and maternal experiences of racism and discrimination on child well-being at follow-up 2, $B = .0074$, 95%CI $[-.001, .07]$, $t(501) = 1.59$, $p = .112$. Given that the interaction was not significant, single slopes of maternal experiences of racism and discrimination at a midpoint were not examined. Contrary to hypothesis 3, maternal experiences of racism and discrimination at a midpoint did not significantly moderate the association between maternal stress at follow-up 1 and child well-being at follow-up 2 (Figure 5).

Figure 5

Maternal Experiences Of Racism And Discrimination At A Mid-Point Moderating The Association Between Maternal Stress At Follow-Up 1 And Child Well-Being At Follow-Up 2



Note: Moderation model showing non-significant moderation. Solid line represents significant pathway, dotted line represents non-significant pathway, B = unstandardized regression coefficient.

Part 2: Qualitative

A total of 40 mothers met the inclusion criteria (lived in the state of Oregon) and responded to open-ended question one (challenges and concerns), open-ended question two (most helpful), or both. In terms of other key sample characteristics, 31 of 40 mothers completed only one survey (baseline only) and nine mothers completed more than one survey (range 4 to 14 surveys total). In all, the 40 mothers responded to at least one open-ended question in 97 surveys. Four of the 40 mothers responded to the open-ended questions in Spanish. As previously noted, Spanish responses were translated by dissertation writer (native Spanish speaker).

The results will be presented first for open-ended question one (challenges and concerns) and then open-ended question two (most helpful). The results are organized by themes and reports the frequency of how often the theme/subtheme was coded. Within each theme, descriptions of responses are listed, and representative quotes are provided with a participant ID number.

Open-Ended Question One: What are the Biggest Challenges and Concerns for You and Your Family Right Now?

A total of 39 mothers provided a response to open-ended question one 94 times with six of the responses including only one or two words. Through data analytic methods informed by Braun and Clark's (2006) phases of thematic analysis, the data were distilled into five main themes: (1) maternal factors (stress), (2) family functioning, (3) child well-being (4) financial factors, and (5) other. While my initial codes included "culturally relevant factors" and "maternal experiences of racism and discrimination," final analyses revealed that no responses were coded as these constructs. Table 12 includes the themes, the sub-themes, and the total number of times each specific code was assigned for open-ended question one.

Table 12*Open-Ended Question One (Challenges/Concerns) Theme Count*

Theme	Sub-theme	Sub-theme Count	Total Count for Theme	Total Num of Participants
Maternal Factors (Stress)	○ Parenting demands	13	49	19
	○ Psychological distress	36		
Family Functioning	○ Familial relationships	6	6	5
Child Well-Being	---	-	31	17
Financial Factors	○ Employment concerns	6	34	16
	○ Material hardship	28		
Additional Concerns	○ Childcare and school – availability of and impact of closures	22	-	11
	○ COVID-19 health and safety	30	-	14
	○ Physical activity or time outdoors – lack of	6	-	6

Theme 1: Maternal Stress. Half of the mothers (19 of 39) identified maternal stress as being one of the biggest challenges and concerns they and their families were experiencing. These included responses describing parenting demands, for which caregivers described challenges meeting parental responsibilities including work-life balance (used 13 times). Maternal stress also included numerous responses describing mothers own psychological distress, in which mothers described their own psychological well-being and levels of distress. Overall, Maternal Stress was the most frequently described challenge/concern, with 49 of 94 responses following under this theme.

Struggling to find a balance between being a parent, working, and being responsible for leading remote learning emerged as an important topic. One mother emphasized the struggle of

navigating multiple roles within her family noting, that her biggest challenge and concern was *“Juggling working from home and in person, with husband remotely going to grad school, with a toddler in the house and only a babysitter to help occasionally (ID# 20).* Mothers also noted additional parenting challenges that come from managing work while more people being physically home and associated stress that comes from multiple people being home regularly. One mother stated that it was challenging to *“work from home with more children in the home”* and manage the *“daily stress of everyone being home [Trabajo desde casa más niños en la casa, el estrés diario de estar todos en la casa] (ID# 1).”*

Mothers also mentioned the impact of inconsistent or nonexistent support, childcare or in-person schooling, on their ability to meet parenting demands. One mother shared that their *“Biggest challenge is dropping everything to work from home while parenting a young child, reworking everything I was supposed to do and teach that week (ID# 20).”*

Struggles to meet parenting demands also impacted mother’s well-being. Mothers noted that while they wanted to work or needed to work for financial reasons, they found it very stressful keeping up with their different responsibilities. One mother noted that, *“I want to work, I’m happy to finally be back but it is so stressful trying to keep up with it all while working from home (ID# 31).”*

In addition to feeling stressed, the multiple mothers noted concerns over their own psychological well-being (44%). Specifically, mothers noted concerns over their mental health, a lack of socialization due to isolation, trying not to fall into despair, and uncertainty about the future. When describing their personal concerns and challenges mothers shared that they experienced feelings of *“desperation,” “isolation,” “loneliness,” “boredom,” “anxiety,” being “trapped,” and “afraid.”*

When describing her biggest concern, one mother noted, *“For me, it’s the isolation. Feeling like you can’t socialize or that people don’t want to socialize out of fear, that worries me because sometimes it is good to get together with friends. Especially as a full-time mom [Para mi, es el aislamiento. Sentir que no se puede socializar o las personas no quieren socializar por miedo, eso me preocupa porque a veces hace bien reunirse con amigos. Especialmente siendo mamá a tiempo completo.] (ID# 39).”*

Theme 2: Family Functioning. Only five mothers reported challenges or concerns over their family environment including relationships between family members. While one mother noted concerns over family members *“Getting along (ID# 19),”* another shared concerns over *“Interactions with family (ID# 7).”* One mother noted the daily stress that comes with everyone being in the home due to COVID-19 precautions. Overall, mothers’ responses focused on concerns and challenges at the maternal or child-level rather than the familial.

Theme 3: Child Well-Being. Several mothers (17 of 39) noted that one of the biggest challenges and concerns for them and their family was for their child(ren)’s well-being (code assigned 31 times). These mothers reported concerns for a range of factors that are components of child(rens) well-being from socio-emotional development to physical well-being. Specifically, most mothers reported concerns for their children’s social emotional development with a focus on their level of socialization, comfort in interacting with others, and unmet social needs. One mother noted that her biggest challenge and concerns was, *“My child wanting to interact with other children but not being able to due to covid (ID# 18).”* Another mother shared that it was challenging to try and navigate following COVID-19 safety precautions and a need for socializing their toddler. She noted that her family was *“trying to figure out how to ease back into society. We took our daughter to the zoo recently, and she seemed overwhelmed (honestly so*

were we). She told us she wanted to leave and go home to be with just us. Figuring out how to balance the need of starting to socialize her as a two year old, while still worrying about Covid, and if vaccines will be available (ID# 2).”

Mothers also noted challenges and concerns related to their child(ren)’s mental and physical health with an emphasis on behavioral concerns, overall mood, and physical activity. One mother noted that it was challenging “*Keeping moods good*” while also “*controlling tempers/tantrums*” while another noted concern over “*Keeping [her] children active in summer [Mantener a los niños activos en el Verano]* (ID# 1).”

Concerns about access to services including a quality education emerged as an important topic. Mothers emphasized that these services were needed and deserved for their children’s well-being. One mother shared that her family had “*...three special needs children who aren’t receiving the therapies and help that they need to be successful* (ID# 14)” while another noted that it was challenging “*Finding the best place and means to get my kid the proper education she deserves* (ID# 32).”

Theme 4: Financial Factors. Multiple mothers (16 of 39) reported challenges and concerns about employment insecurities and difficulties meeting the basic needs of their families. Mothers who reported employment insecurities noted challenges centered on being unemployed, concern over employment stability, or difficulties securing employment. One mother in particular reported, “*Our biggest challenges right now is not being able to work. We got Covid in November 2020 and so did my mom, which was my children childcare provider and she hasn’t felt the same ever since. We can’t afford child care, so I had to quit my job* (ID# 35).”

Without an income, mothers noted difficulties or their inability to meet the basic needs of their families including, housing, utilities, food, and healthcare. With material hardship also

came challenges paying different types of bills and greater levels of debt. Across responses, food and housing insecurities emerged as important stressors. While some mothers reported challenges such as being concerned that they would be able to *“Keep food in the house and a roof over our head (ID# 8),”* or *“pay rent [poder pagar la renta] (ID# 24),”* other mothers reported concerns over finding affordable housing or purchasing a house in the future. A few mothers also shared the consequences/ downstream effects of their financial stressors. One mother reported, *“The biggest challenges is to stay a float and figure out how to pay out next months bills, and still have food on our table. As a single mother we have to share housing and in order to make ends meet (ID# 40).”* And still, another noted, *“we have been living in a tent because we were evicted from our home all our belongings were stolen and have no money to find a room to live in (ID# 4).”*

Theme 5: Additional Concerns. Responses that did not fit under the established themes (i.e., maternal stress, family functioning, child well-being, and financial factors) were grouped under an “Additional Concerns” theme. Within this theme, responses centered on maternal challenges and concerns with childcare/schooling, health and safety related to COVID-19, and physical activity/ time outdoors.

COVID-19 Health and Safety: About a third of mothers (14 of 39) reported concerns centered on navigating COVID-19 guidelines and precautions especially when it came to their child[ren]. While some mothers noted concerns about others following safety precautions, others noted concerns over the impact of the ever-evolving COVID-19 guidelines being lifted. One mother shared, *“That not enough people are wearing masks. I feel a bit trapped with where I can go since I cant trust my neighbors to be decent humans (ID# 15),”* and another reported being *“Worried if things going back to normal will cause more illness in my family, because of lack of*

masking, restrictions, etc (ID# 28).” One mother noted that while she and her husband were vaccinated, *“we’re [they were] not sure what is and isn’t safe for our daughter. She’s getting to the age where we’re not sure how we should allow her to interact with others due to covid (ID# 2).*”

Childcare and School – Availability of and Impact of Closures: Mothers (11 of 39) also expressed concerns and challenges related to childcare and school. Mothers noted difficulties not only finding childcare but also knowing whether it was safe to send their children to childcare or school. One mother shared that her biggest challenge or concern was *“Finding childcare this fall. Also deciding whether or not to send the oldest to kindergarten (ID# 30).*” In addition to the stress of finding childcare, mothers also noted costs as an additional stressor. One mother reported that they *“Did not qualify for child care (erdc) will have to pay out of pocket 500 every week, do not make enough for child care. Will need to look for new options of child care, which is very limited (ID# 34).*” This mother along with others noted concern over the safety of school and the impact of their closure on them and their children especially as working parents. Mothers noted questions over *“Will school open, will it be safe...so many questions (ID# 34),”* fear over *“...schools getting shut down due to COVID (ID#28),”* and being *“worried about going back to virtual (ID# 28).*”

Physical Activity or Time Outdoors – Lack: A few mothers (6 of 39) reported a lack of physical activity or time outdoors as some of the greatest challenges and concerns. While one mother noted concern over having *“Less movement and exercise. Not getting outside (ID# 16),”* another noted that it was challenging to *“No[t] being able to participate in gymnastic, dance and swimming (ID# 33).*

Open-Ended Question Two: What is helping you and your family the most right now?

All 40 mothers provided a response to open-ended question two 91 times with 21 responses including one or two words. The data for question two was distilled into six main themes: (1) maternal support and coping, (2) family functioning, (3) child well-being, (4) financial factors, (5) culturally relevant factors, and (6) additional supports. Table 13 includes the themes, the sub-themes, and the total number of times each specific code was assigned for open-ended question two.

Table 13

Open Ended Question Two (Most Helpful) Theme Count

Theme	Sub-theme	Sub-theme Count	Total Count for Theme	Total Num of Participants
Maternal Factors (Support and Coping)	○ Mindset, skills, and psychological supports	8	8	7
Family Functioning	○ Family cohesion and support	33	46	17
	○ Routines	7		
	○ Interparental relationship	6		
Child Well-Being	---	6		3
Financial Factors	○ Government aid	19	35	13
	○ Financial security	8		
	○ Employment	8		
Culturally Relevant Factors	○ Familismo	33	46	20
	○ Social and community support	13		
Additional Supports	○ Physical activity or time outdoors – availability	17	29	13
	○ Childcare and school – availability	7		
	○ COVID-19 health and safety	5		
	○ Nothing	1		

Theme 1: Maternal Support and Coping. When describing what was helping them and their family the most, seven of 40 mothers reported relying on a positive mindset, their internal coping skills, or psychological support. Having a positive mindset included keeping “*hope (ID# 6)*” and “*staying positive (ID# 10)*.” Other mothers noted relying on their coping skills including focusing on “*staying mentally strong (ID # 12)*,” engaging in “*self-care (#28)*,” and doing the best they could despite things being hard (ID# 31). Additionally, two mothers reported mental health support including therapy and medication the factors helping them and their families the most. One mother noted that what helped her was, “*having someone to talk to about what’s going on (ID# 15)*” and still another noted that for her it was her “*therapist and anti-anxiety meds (#29)*.”

Theme 2: Family Functioning. Just over 40% of the mothers (17 of 40) identified factors at the family level as being the thing that was the most helpful to them. These factors included cohesion within the family, support from their partner, and relying on family routines. Overall, Family Functioning was the most coded theme when mothers described what they found the most helpful to them and their families, with 46 of 91 responses following under this theme.

Spending quality time together, communication within the family, and strong relationships between family members emerged as important themes. Mothers reported finding support in “*being together (ID #30)*,” “*extra time together (ID #3)*,” and “*having time together (ID#11)*.” Another mother identified that it was only spending time as a family but also “*enjoying the time we do spend together (ID# 28)*.” Some mothers also established family routines to promote time together. As one mother noted, she found “*setting routines, still trying to do things to have fun, even if it’s just going to the park or flying kites at the beach (ID#2)*” as the most helpful.

Within the family, a handful of mothers also mentioned support from their partner and a strong interparental relationship as being the most helpful. As one mother noted, for her it was a *“happy marriage and [being] very in love with baby and our little family (#29).”* When it came to the interparental relationship mothers noted the helpfulness of *“open communication with my[their] spouse (ID# 34)”* and quality time with just their partners via date nights (ID# 28).

When it came down to staying connected, mothers reported relying on family members both locally and afar. One mother noted that what she found helpful was *“having family locally to be with because they've been our support with everything since forever (ID# 26).”* Other mothers relied on technology to stay connected with and get support from family. One mother reported that *“Zoom and Facetime [Facetime] have made a huge difference, being able to stay in touch and see each other when we are far apart (ID# 20).”*

Theme 3: Child Well-Being. When it came to factors at the child level, only six responses by three mothers were coded under a “Child Well-Being” theme. These three mothers reported that establishing and keeping routines for their children was the thing that they found the most helpful. When it came to their children, mothers reported the usefulness of *“keeping a schedule (ID# 11),” “trying to stay consistent and scheduled (ID# 2),”* and *“regular outings with the kids (ID#28).”*

Theme 4: Financial Factors. Multiple mothers (13 of 40) reported financial factors including government aid, being financially stable, and having employment as the biggest supports. In fact, about 40% of total responses to open-ended question were coded under the theme of “Financial Factors (35 responses) with the majority of responses mentioning government aid. When it came to federal aid, time and time again mothers mentioned support with food. Mothers mentioned, *“free food boxes (ID# 3),” “food pantries (ID# 40),” “SNAP*

benefits [Supplemental Nutrition Assistance Program] (ID #16),” and *“P-EBT [Pandemic-EBT] (ID# 35).”* One mother even noted that her weekly food boxes gave her access to food her family didn’t typically eat as they contained items they *“wouldn’t normally afford to buy”* and access to *“fresh veggies and fruit”* via Community Supported Agriculture in the Summer (ID# 21). In addition to food support, mothers reported support via *“rental assistance (ID#16),”* *“stimulus checks (ID#35),”* and pandemic unemployment assistance (ID#2).

When it came to additional financial factors, four mothers mentioned having financial security via their savings accounts as the factor that was the most helpful to them and their family. As one mother noted, *“It’s our own savings that are helping me a lot right now (ID# 23).”* An additional but related subtheme that arose was employment security. While some mothers stated that the most helpful factors were *“continuing to work [continuar trabajando] (ID# 24)* and *“steady employment (ID# 37)”* other responses centered on employment flexibility in work schedules or work location. One mother noted that the thing that was most helpful to her and her family was having *“flexible work schedules so one of us can always be with her [child] (ID# 2).*

Theme 5: Culturally Relevant Factors. Multiple mothers referenced values, practices, or factors that are traditionally associated with the Latinx community, including a focus on family cohesion (subtheme - "familismo") and support from their broader community (sub-theme – "social and community support"). As the theme of "Family Functioning" already included a "family cohesion and support" subtheme (coded 33 times), all responses referencing family cohesion and support within the family unit were also coded under the "familismo" subtheme. Responses referencing support outside the family were coded under the "social and community support" subtheme. A handful of mothers (5 of 40) reported that having support from their social

circle and the broader community was the most helpful to them. When it came to social support, some mothers noted *"relying on friends for respite (ID# 14), having "virtual visits with friends (ID# 28)," and having "aid from other families willing to help with child care (ID# 34)"* as being the most helpful. Other mothers mentioned community support. One mother (ID# 21) shared that she found *"mommy fb [Facebook] groups"* and having *"tribal support"* to be the most helpful."

Theme 6: Additional Concerns. Responses that did not fit under the established themes were grouped under an "Additional Concerns" theme. Subthemes were similar to those in the open-ended question one and centered on childcare/school, COVID-19 health & safety, and physical activity/ time outdoors.

COVID-19 Health and Safety: Four of 40 mothers (10%) shared that the thing they were finding the most helpful for them and their family was following COVID-19 guidelines in an effort to keep everyone health [*"tener nuestra salud (ID# 27)"*]. One mother noted that for her, the most helpful things was, *"keeping our house clean, not having a lot of visitors over. Disinfecting everything (ID# 36)."* Other mothers reported following similar guidelines such as getting the *"[COVID-10] vaccine (ID# 20)"* and *"continuing to isolate (ID# 2)."*

Childcare and School – Availability: A handful of mothers (5 of 40) mentioned the availability of childcare and school as factors that are helping them and their families (sub theme coded in 7 responses). Within this subtheme, mothers noted that both them and their children benefited from school being available. As one mother reported, *"Having my kids in school, it gives us a break and gives them something to do and look forward to everyday (ID# 28)."* Other mothers reported similar sentiments when it came to childcare, often mentioning that it provided them with respite. One mother shared an additional way that school was helpful to her and family, it provided her family with access to food. She reported, *"Doing school everyday is*

helping. Both kids schools are supporting with lunches. The youngest's (a non profit nursery school) does food boxes too (ID# 16)."

Physical Activity or Time Outdoors: Almost 20% of responses to open ended- question two were coded under the "Physical Activity or Time Outdoors" subtheme (17 of 91 responses). Across these responses, 13 mothers (~33%) noted engaging in various activities and time outdoors as the factor that was most helpful to them and their families. When discussing activities to engage in, multiple mothers referenced spending time in nature with a focus on going on walks, *"going to parks and walking (ID# 13)"* and *"walking in nature often [salir a caminar en la naturaleza seguido] (ID# 39)."* When it came to additional activities, mothers reported, *"exercising...sports [hacer ejercicio... deportes](ID# 1)"* or *"playing outside (ID #39)."*

CHAPTER IV

DISCUSSION

The overarching goal of this dissertation was to use mixed methods to advance the field's understanding of the relationship between maternal stress, family functioning, and child well-being in a sample of Latinx mothers with young children (ages 0-5 years old) who participated in the Rapid Assessment of Pandemic Impact on Development–Early Childhood (RAPID-EC) project between April 2020 and April 2022. The first part of this dissertation used quantitative data from a nationally drawn sample of Latinx mothers to test the association between maternal stress, child well-being, and relevant contextual factors. Quantitative analyses included testing material hardship as a predictor of maternal stress (Aim 1) and examining the role of intrafamily conflict (Aim 2) and maternal experiences of racism and discrimination (Aim 3) on the associations between maternal stress and child well-being. The second part of this dissertation explored mothers' lived experiences of stress via qualitative data (i.e., responses to open-ended questions) from a subsample of Latinx mothers from the RAPID-EC project who reside in Oregon. More specifically, mothers' self-reported biggest challenges and greatest supports were examined.

As the utilization of mixed methods allows for the exploration and potential uncovering of unique relationships between constructs of interest, the first part of the discussion highlights major findings in key study associations, that is a) material hardship and maternal stress, b) maternal stress, child well-being, and intrafamily conflict, c) maternal stress, child well-being, and maternal racism and discrimination. The description will then emphasize areas of agreement or overlap between quantitative and qualitative findings before highlighting where the findings are situated in the literature (past and present). The second part of the discussion will focus on

strengths. The third section will describe limitations before progressing to discuss future directions. Potential clinical implications will also be considered.

Similarities and Differences in National and Oregon Samples

Before discussing specific findings from the main study associations, it is essential to highlight similarities and differences in the study samples used in this work. Participants in this dissertation's quantitative and qualitative portions are part of the larger RAPID-EC project. All participants in this dissertation identified as female, were 18 years or older, lived in the U.S., were mothers of at least one child between the ages of 0 and 5 years old, spoke English or Spanish fluently, and self-identified as Latinx (Hispanic/Latino(a)). It is important to know that while the quantitative portions of this dissertation included a national sample with smaller subsamples for Aims 2 and 3, the qualitative portion only included mothers who lived in the state of Oregon.

Overall, the samples were fairly similar regarding key demographic variables. The majority of the full quantitative and qualitative samples reported a primary language of English (80% and 83%, respectively), being born in the United States (68% and 68%, respectively), number of children in the home (61% and 58% had two or less child in the home, respectively). Regarding whether a family lived at or below the federal poverty level before the start of the COVID-19 pandemic (FPL, based on their 2019 annual income and household size), 37% of families in the full quantitative sample and 43% of families in the qualitative sample reported living at or below 200% federal poverty level.

As expected, there were also differences in demographic variables, including self-identified race and number of people living in the home. In terms of self-identified race, 58% of the full quantitative sample self-identified as only White, and 27% wrote in "Hispanic," "Latino,"

or a specific origin group (i.e., Mexican). Within the qualitative Oregon sample, 48% of the full quantitative sample self-identified as only White, and 33% wrote in "Hispanic," "Latino," or a specific origin group (i.e., Mexican). Furthermore, while 32% of the national sample had three or fewer people living in the home, only 25% of the Oregon sample had three or fewer people.

Material Hardship and Maternal Stress

The first relationship examined in this dissertation was between material hardship and maternal stress. This relationship was examined empirically using a national sample of Latinx mothers of young children (age five years old and younger) and qualitatively using a subsample of Latinx mothers who resided in Oregon. Material hardship, measured by the total number of basic needs the family had difficulty paying for (first survey), significantly predicted maternal stress (parenting stress and psychological distress) at follow-up. Findings from the qualitative work aligned and extended challenges and concerns centered on financial factors in the Oregon subsample of Latinx mothers. Forty-one percent of Oregonian Latinx mothers ($n = 16$) reported difficulties meeting the basic needs of their families and concerns about employment insecurities. Half of the mothers ($n=19$) also identified maternal stress as being one of the biggest challenges and concerns they and their families were experiencing during the COVID-19 pandemic. These included responses describing parenting demands, for which mothers described challenges meeting parental responsibilities, including work-life balance. Maternal stress also included numerous responses describing mothers' own psychological distress, in which mothers described their psychological well-being and levels of distress. Overall, the theme of maternal stress was the most frequently described challenge/concern mothers experienced during the pandemic, with half of all open-ended responses following under this theme. The quantitative data and related analyses also allow us to look at directionality via temporal precedence and

highlight the downstream effect of material hardship on maternal stress. The qualitative data helps contextualize this finding in that almost half of Oregon Latinx mothers are sharing that their biggest challenges and concerns centered on financial factors and maternal stress. These results suggest that material hardship has a significant impact on self-reported maternal stress (psychological distress and parenting stress) in Latinx mothers with young children.

These findings are consistent with prior research that highlights the impactful relationship between economic stressors/pressure, financial hardship, and caregiver functioning. Namely, the original Family Stress Model proposed by Conger and colleagues in 1994, further adaptations of the model, including culturally informed versions that center on the experience of Latinx families (e.g., Martin et al., 2019; Palermo et al., 2018; White et al., 2015) and a more recently modified version created to capture the impact of the COVID-19 pandemic (Prime et al., 2020). As previously noted, the Family Stress Model proposes a cascade in which adverse economic conditions and economic pressure create external stress, which then leads to increased parental psychological distress, parenting stress, and distress within the family system, which ultimately disrupts child functioning. It is, therefore, unsurprising that the Family Stress Model could be used to examine the impact of the COVID-19 pandemic. The literature has highlighted that the U.S. Latinx population experienced disproportionately high rates of unemployment and pay cuts as the pandemic began and continued (CDC, 2020; Garcia et al., 2021; Pew Research Center, 2020). It is therefore anticipated that Latinx mothers across the U.S. and within the state of Oregon would express concerns about their employment status, ability to meet basic needs, and getting into further debt. One potentially unique contribution of this dissertation is the ability to look at the directionality of effects; that is, the quantitative data highlighted that material

hardship significantly predicted maternal stress (psychological distress and parenting stress) at follow-up.

This dissertation also adds to the evidence base, which has found elevated levels of maternal stress in mothers across the world, in the U.S., and within the U.S. Latinx population during the COVID-19 pandemic (e.g., Hibel et al., 2021a; Hibel et al., 2021b; Wade et al., 2021). Research very early in the pandemic, June 2020, found that when compared to other racial-ethnic groups, Latinxs reported a higher prevalence of anxiety, depressive and trauma-related symptoms in conjunction with increased substance use and even high rates of suicidal ideation (Czeisler et al., 2020). As found in this dissertation, Latinx mothers continued to experience elevated levels of stress and psychological distress within the context of COVID-19-related stressors (e.g., financial hardship, stigma, and fear). Non and colleagues (2023) found that a high proportion of Mexican mothers in Southern California reported moderate to severe impacts of COVID-19 (e.g., reduced family income early) in the first few weeks and months after California's stay-at-home order. Furthermore, they found that mother's experience of COVID-19-related stressors early in the pandemic was significantly associated with higher levels of COVID-related fears (e.g., worries about being able to take care of their children if they got COVID-19) and high levels of anxiety and depression roughly one year later. These findings are important as maternal stress and psychological distress are at risk in the face of material hardship.

Maternal Stress and Child Well-Being

The second relationship examined was between maternal stress and child well-being. Maternal stress (again measured by a composite variable of psychological distress and parenting stress) at the first follow-up significantly predicted child well-being (measured by the presence of behavioral problems) at a second follow-up in the national sample of Latinx mothers. Open-

ended responses from Latinx mothers in Oregon not only align with this finding but also provide further information about the types of concerns Latinx mothers had over their child's development. About forty-four percent of the mothers ($n = 17$) noted that one of the biggest challenges and concerns for them and their families was for their child(ren)'s well-being. These mothers reported concerns about a range of factors, including their child(rens)' physical development, mental health, level of socialization, and behavioral problems. Latinx mothers in Oregon also expressed concern over the long-term impact of limited socialization due to social distancing, an absence of behavioral supports, and a lack of services, especially for children with diverse on their child(ren)'s development. These quantitative and qualitative findings corroborate decades of pre-pandemic, which has highlighted the complex relationship between maternal mother's mental health, parenting stress, and measures of child(ren)'s functioning (e.g., behavioral problems and psychopathology in children in global and U.S. samples pre-pandemic (e.g., Goodman et al., 1999) and during the pandemic (e.g., Brown et al., 2020). Systemic reviews and meta-analyses exploring these associations have also delineated mechanisms for intergenerationally transmitting risk (Goodman et al., 2020).

Researchers have also found evidence of the association between mothers' mental health, level of parenting stress, and child outcomes in Latinx samples pre-pandemic and during the pandemic (Harris & Santos, 2020; Boyer et al., 2023). The only systematic review that explores the relationship between maternal depression in Latinx mothers and their young children's socioemotional outcomes (children ages 0-5 years), a similar sample to that of this dissertation, found that maternal depression was inversely correlated with child socioemotional outcomes (Harris & Santos, 2020). This review also found that factors such as cultural contextual stressors and parenting (measured by material sensitivity) influence this association.

Maternal Stress, Child Well-Being, and Intrafamily Conflict

The establishment of the association between maternal stress and child well-being within the national sample of Latinx mothers allowed for the exploration of additional factors that may contribute to these associations. Based on past literature that has highlighted the association between maternal stress and family conflict and child well-being, intrafamily conflict (a composite variable of interparental conflict and parent-child conflict) was examined as a potential mediator. While maternal stress at follow-up 1 significantly predicted intrafamily conflict at a midpoint, there was no significant effect of intrafamily conflict at a midpoint on child well-being at follow-up 2. Contrary to expected, intrafamily conflict at the midpoint was not a significant mediator of the association between maternal stress at follow-up 1 and child well-being at follow-up 2. Even so, the findings are in line with what was qualitatively reported by Latinx mothers in Oregon. That is, no mothers explicitly referenced conflict between parents or within the parent-child relationship as the biggest challenge or concern they and their family were experiencing. Only 13% (n = 5) of mothers reported challenges or concerns over their family environment, including family interactions and family members getting along once safety measures during COVID-19 required that people stay home. Overall, mothers' qualitative responses focused on concerns and challenges at the maternal or child level rather than the familial level.

Overall, findings from this dissertation related to the role of intrafamily conflict on known associations between maternal stress and child well-being are inconsistent with the pre-pandemic and pandemic literature centered on the influence of intrafamily conflict. More specifically, findings are not consistent with pre-pandemic culturally adapted/informed versions of the FSM (e.g., Martin et al., 2019), which point to interparental conflict specifically as a pathway driving

associations between maternal distress and child well-being (in this case, adolescent substance use). Findings are also contrary to pandemic literature, which has also shown increased levels of conflict within the family home (Drotning et al., 2023; Xue et al., 2020) and intrafamily conflict driving associations between parental stressors and child well-being (Peltz et al., 2021).

A few factors may contribute to this dissertation's findings related to intrafamily conflict being inconsistent with the literature on the role of intrafamily conflict on the known association between maternal stress and child well-being and the FSM more broadly. The first potential explanation is that there was little variability in intrafamily conflict reported by the national subsample of Latinx mothers ($n = 306$) who completed the Family Conflict module. More specifically, mothers did not report high levels of conflict within the interparental relationship or the parent-child relationship. A second consideration contributing to null effects is that protective factors within the family system may lead to low levels of conflict and reduce the risk for poor child outcomes (e.g., Germán et al., 2009). In fact, Martin and colleagues (2018) culturally informed FSM, described above, found that parents' familism (sometimes referred to as *familismo*) moderated the association between parent distress (mothers and fathers, separately) and interparental conflict. The authors note that familism may be a source of resilience and disrupt the family stress process as outlined in the FSM. Findings from the open-ended responses of Latinx mothers in Oregon may also lend evidence of protective or supportive factors at the family level, which may have downstream effects on children. When asked what was helping them and their families the most, just over 40% of the mothers (17 of 40) identified multiple factors at the familial level, including cohesion within the family, support from their partner and a strong interparental relationship, high levels of social support within the nuclear and extended family and relying on family routines.

Maternal Stress, Child Well-Being, and Maternal Experiences of Racism and Discrimination

After establishing that there was a relationship between maternal stress and child well-being, this dissertation explored the potential impact of maternal experiences of racism and discrimination on the association between maternal stress and child well-being. In contrast to the Aim 3 hypothesis, maternal experiences of racism and discrimination did not moderate the relationship between maternal stress at follow-up 1 and child well-being at follow-up 2. Furthermore, maternal experiences of racism and discrimination at a midpoint did not significantly predict child well-being follow-up 2. Surprisingly, Latinx mothers in the Oregon sample did not share experiences with racism or discrimination when asked to share the biggest challenges and concerns they and their families were experiencing. While these findings were unexpected, they contribute to the literature on vicarious racism and child outcomes. Specifically, as previously noted, there is a growing body of literature that explores the association between vicarious racism, exposure to racism secondhand, and child health outcomes (i.e., mental health, socioemotional development, and physical health) (Quintana & McKown, 2008; Saleem et al., 2020; Zimmerman & Miller-Smith, 2022). Heard-Garris and colleagues' 2018 systematic review (included 30 studies) on vicarious racism and child health found mixed results such that almost half of the studies found significant associations between exposure to vicarious racism and a child health outcome, and more than half of the studies yielded null results. It is important to note that the systematic review highlighted that the definition of exposure to vicarious racism varied by study but often included exposure to racism experienced by a family member, friend, or peer. It is also important to consider that maternal experiences of racism and discrimination may impact children on emotional and behavioral outcomes not

assessed in this work or might only be detectable at the biological level and not at the behavioral level at this stage of development. This possibility is supported by work from some more recent studies. For example, Condon and colleagues (2021) examined the associations between maternal experiences of racial discrimination and child indicators of toxic stress (biological and mother-reported child behavioral problems) in a predominately Latina/Hispanic sample (64%) enrolled in the Minding the Baby™ (MTB) Early School-Age follow up study. Condon and colleagues found that maternal experiences of racial discrimination were significantly associated with some biological markers of toxic stress but not child behavioral problems. Therefore, it would be premature to conclude that maternal experiences of racism and discrimination did not play a role in the relationship between maternal stress and child well-being overall.

A few contextual factors are important to consider when interpreting this dissertation's findings related to the role of maternal experiences with racism. One critical factor to consider is the rates of racism and discrimination experienced by racial/ethnic minorities and Latinxs, specifically during the COVID-19 pandemic. In a nationally representative online survey of 5,500 racial/ethnic minority and White adults from December 2020 to February 2021, Strassle and colleagues (2022) found that 22% of the participants reported experiencing COVID-19-related instances of discrimination. When examining rates by racial/ethnic group, Latinx participants reported the second highest rates, following Asian participants. In the annual National Survey of Latinos, administered through the Pew Research Center in March 2021, 54% of U.S. Latinx reported experiencing at least one form of discrimination since the start of the pandemic. While the survey did not explore gender differences, findings highlight that those experiences with discrimination varied by skin color, nativity status, age, and educational attainment. In terms of this dissertation, the national subsample of Latinx mothers who

completed the Maternal Experiences of Racism and Discrimination module ($n = 518$) did not report self-report high levels of experiences of racism and discrimination. It is also possible that this dissertation and the RAPID-EC project did not encompass a broader range of questions that may have better assessed the presence and impact of sociocultural stressors such as acculturation, microaggressions, or a fear of deportation on Latinx mothers and their children. For example, Non and colleagues (2023) found that during the first year of the pandemic, 25% of their sample of Mexican mothers in Southern California worried at least some of the time that they would get deported if they got COVID-19. A third of mothers (33%) also worried at least some of the time that a family member would get deported if they got COVID-19.

Another factor that may have contributed to null effects is the presence of protective factors, including culturally relevant ones. Findings from the open-ended responses of Latinx mothers in Oregon point to the mother's internal strengths in conjunction with support from within the family (i.e., familismo), the mother's social circle (i.e., friendships), and the broader community as the most helpful. When asked to describe what was helping them and their family the most, 18% of Latinx mothers in Oregon reported relying on a positive mindset (e.g., having hope or staying positive), their internal coping skills (e.g., practicing self-care), or psychological support (e.g., having a therapist or psychotropic medication). An emphasis on coping skills is also in line with research on strategies used by Latinx youth and families in response to experiences of discrimination. In a study aimed at identifying strategies used by Mexican-origin adolescents and their parents after experiencing racial-ethnic discrimination, Martin Romero and colleagues (2022) found that families use individual (e.g., reframing with pride and ignoring) and interdependent coping strategies (e.g., talking about concerns and problem-solving within the family unit).

Strengths

This dissertation had several strengths, including using mixed methods to answer multidimensional research questions by drawing on the strengths of quantitative and qualitative research methods. Furthermore, an emphasis on highlighting areas of congruence and incongruence between the quantitative and qualitative allowed key study associations to be further contextualized. The study design of the quantitative portions and related analytic methods also allowed us to look at directionality via establishing temporal precedence, which includes establishing that the cause occurs before the effect (Albers & Kratochwill, 2010). Another strength of this dissertation was its large sample size in the quantitative portion and the inclusion of a national sample of Latinx mothers across the United States. Beyond the mixed method approach, this work examined factors across the multiple systems within which a child exists; that is, it looked at the influence of factors at the maternal, family, and child level. This type of sample and more systems approach allowed for a more nuanced understanding of the stress experience of Latinx mothers and their children. This dissertation was also one of the few studies to examine the impact of maternal experiences of racism and discrimination on child well-being in a sample of Latinx mothers only and one of the first to examine the association in a sample of young children (most studies include older children and adolescents).

Limitations

The generalizability of the findings from this dissertation are limited by a range of factors, including the broader aim of the overall RAPID-EC project. It is important to remember that the RAPID-EC project's overall focus was to recruit a national sample via convenience sampling rather than a Latinx sample. Further, the purpose of RAPID-EC was to have a dynamic survey that captured a range of topics and could be edited as needed, constructs could be

removed or added. Because of the national focus, the overall RAPID-EC project was not explicitly created to capture Latinx families' unique experiences, whether that be sources of strengths or cultural-specific stressors (e.g., migration or acculturative stress) that may be tied to specific identities. Had it been a survey of Latinx families' experience of the COVID-19 pandemic, there may have been a slight change in focus to factors that the literature has shown influence this specific population or modifications to the questionnaires used to quantify and measure experiences.

As previously noted, the RAPID-EC project focused on capturing information about a breadth of topics rather than a depth of topics. Therefore, there was a tension between balancing participant burden and the number of constructs and even items on each survey. While having a small number of items on each survey allowed for greater sample size, it also meant fewer items per construct, such that the validity and reliability of composite variables have not been established. For example, within the quantitative dataset, the RAPID-EC project captured data about child behavioral problems since the project began in April 2020 but did so with a two-item version of items from an established and well-tested child measure, the Child Behavior Checklist (CBCL). While the two items captured information about internalizing and externalizing behaviors and the construct of child behavioral problems, often used as a marker of child well-being, child behavior is just one aspect of child well-being. Furthermore, focusing on two items leaves little room for variability in responses or more sensitive measures of change over time. As previously noted, due to the overall study design, this dissertation often relied on composite variables of key study constructs (e.g., maternal distress) created from highly correlated items from standardized questionnaires. Therefore, It is possible that significant effects were not detectable via these specific composite variables. For example, contrary to expected, intrafamily

conflict at a mid-point did not significantly predict child well-being at follow-up 2. As intrafamily conflict was measured via a composite variable of interparental conflict and parent-child conflict, examining the independent effects of interparental conflict and parent-child conflict may have yielded different findings.

The tension in breath versus depth also exists within the qualitative data such that the two open-ended questions examined in this dissertation asked mothers to identify the biggest challenges and concerns (open-ended question one) and what was most helpful (open-ended question two) for both them and their families ("you and your family") within one question. That is, mothers were not prompted to think about themselves separate from their family and their children. Had the mother been asked about each group separately, other themes in challenges/concerns and helpful factors may have emerged.

Future Directions and Next Steps

There are three specific future directions that will extend the findings from this dissertation – examining whether associations vary by the mother's primary language, exploring within-group differences (specific Latinx subgroups), and investigating the impact of paternal stress on child well-being.

Mother's Primary Language

This dissertation examined the association between material hardship, maternal stress, child well-being, intrafamily conflict, and maternal experiences of racism and discrimination in a national sample of English and Spanish-speaking Latinx mothers with young children. Future research should examine whether the mother's primary language (English vs Spanish vs. bilingual) impacts found associations. Primary language should be a key area of interest as roughly 63% of the U.S. Latinxs population spoke Spanish in the home in 2022 (39.7 million of

63.6 million U.S. Latinos), with Spanish being the is the 2nd most commonly spoken language in the U.S in 2023 (Pew Research Center, 2023b). Furthermore, while speaking Spanish is often noted as a unifying factor amongst U.S. Latinxs, pre-pandemic and pandemic research has identified being criticized for speaking Spanish in public as one discrimination incident many Spanish-speaking Latinx experience. More specifically, roughly 22% of Latinx who completed the National Survey of Latinos in 2018 and 2021 reported being criticized for speaking Spanish in public. Another reason for exploration of the impact of primary language is that Spanish-speaking Latinxs were at higher risk for exposure to COVID-19 due to socioeconomic conditions that disproportionately place them in frontline jobs and a lack of access to equitable resources and information, which contributed to higher levels of overall stress (Mehring et al., 2021). Investigating the impact of maternal primary language is a crucial next step in examining differences within the broader Latinx community.

Latinx Subgroups

While the U.S. Latinx population is not homogeneous and includes individuals across many countries and racial groups, this dissertation examined associations by grouping all U.S. Latinx within the national and then the Oregon sample. Furthermore, Latinx subgroups represent different percentages of the U.S. Latinx population, with most individuals reporting being of Mexican origin (roughly 60%) and Puerto Rican origin (roughly 14%). Examining whether found associations vary by Latinx mother's self-identified Latinx group is an essential next step as Latinx subgroups have various socioeconomic and cultural backgrounds, reasons for coming to the U.S., and acculturation may differ within subgroups (e.g., Roth et al., 2020; Wildsmith et al., 2015).

The Role of Paternal Stress

The influence of psychological distress and parenting stress in Latinx fathers on child well-being is an understudied area despite the U.S. Latinxs being the largest minoritized group within the U.S. (U.S. Census Bureau, 2021). Examining associations between paternal stress and child well-being may identify critical pathways through which risk is transmitted. In fact, there is some pre-pandemic evidence of differential relationships between paternal psychological distress and youth outcomes. For example, when examining associations between neighborhood, economic, and acculturative stressors, and parenting behaviors in a sample of Mexican-American families, White and colleagues (2009) identified different pathways for fathers versus mothers. They found that neighborhood stress influenced fathers' depressive symptoms and parenting but not mothers' symptoms. Furthermore, there is a growing literature that has highlighted that the COVID-19 pandemic has had different impacts on the mental health of female versus male caregivers. In a multi-national sample, Wade and colleagues (2021) found differences between male and female caregivers on self-reported adverse childhood experiences (ACEs), COVID-related stress, and mental health symptoms. Based on study findings, Wade and colleagues suggest that the strength of the effects of COVID-related stress on mental health symptoms, especially substance use, varies by the number of ACEs reported by male caregivers. Identifying potential differences in the association between paternal stress and child well-being is a critical step in further understanding the stress experience of Latinx families.

Clinical Implications

This dissertation's findings have clear clinical implications and highlight potential areas of intervention for not only Latinx mothers but also their children and families. This dissertation has highlighted that multiple pathways influence the well-being of young children, including

financial, familial, and maternal factors influence children's well-being. Therefore, there are numerous points within which policymakers, public programs, researchers, and clinical providers can support Latinx mothers, families, and children.

Findings from this dissertation point to the importance of helping families meet their basic needs as material hardship negatively impacts maternal stress, which in turn influences child well-being. Additionally, supporting Latinx mothers, whether it is through supporting their psychological well-being or reducing parenting stress, may have downstream effects on their family's functioning and children's well-being. To date, effective treatment programs for mothers experiencing psychological distress have varied factors, such as the target of intervention (i.e., the mother, child, parenting, or mother-child relationship) and the inclusion of cultural factors that may be sources of strength (see., Collado et al., 2016; Valdez et al., 2013a). Some studies have also found that programs that integrate parental mental health treatment and the teaching of parenting skills help reduce both maternal symptoms and child behavioral problems (see, e.g., Acri & Hoagwood, 2015; Cuijpers et al., 2015; Everett et al., 2021). These studies suggest that a twofold approach addressing both maternal psychological distress and the mother-child dyad may mitigate or even prevent the development of children's problems while at the same time improving maternal symptoms. Treatment programs may also benefit from incorporating mother-identified factors that are helpful to them and their families, including those identified by Latinx mothers in Oregon. Incorporating these factors may help with treatment buy-in and validate mothers' lived experiences.

Conclusions

Overall, this dissertation found evidence that material hardship is associated with Latinx mothers' maternal stress, which is associated with their child's well-being. These associations

were found after examining quantitative data from a national sample of Latinx mothers who participated in the RAPID-EC project and contextualized by qualitative data analysis from a subset of Latinx mothers who lived in Oregon. When further examining factors that may influence the association between maternal stress and child well-being, this dissertation did not find evidence that the association was mediated by intrafamily conflict or moderated by maternal experiences of racism and discrimination. When asked about their biggest challenges and concerns, Latinx mothers noted concerns about the availability of childcare and school, their health and safety, and physical activity, in addition to concerns around maternal stress, child well-being, and family relationships. Latinx mothers also reported many factors helping them and their families through the pandemic. Some of these included financial support and security, having a positive mindset with coping skills, and culturally relevant factors such as prioritizing cohesion within the family unit (*familismo*) and relying on social/community support. In terms of the well-being of Latinx mothers and their children, future research should examine whether associations vary by the mother's primary language, explore within-group differences (specific Latinx subgroups), and investigate the impact of paternal stress on child well-being. Ultimately, as the well-being of young Latinx children is influenced by their mother's experience of stress and their family's functioning, their well-being can be promoted through support at the child, maternal, or family level.

Appendices

Appendix A

Socio-Demographics For The Quantitative Full Sample And Subsamples

	Total Sample		Mediation Sample		Moderation Sample	
	N	%	N	%	N	%
Maternal Gender						
Female/ Transgender Female	805	100.0	306	100.0	518	100.0
Maternal Ethnicity						
Hispanic/Latino(a)	805	100.0	306	100.0	518	100.0
Maternal Race						
Native American /Alaska Native (only)	16	2.0	9	2.9	14	2.7
Asian (only)	3	0.4	2	0.7	3	0.6
Black/African American (only)	23	2.9	10	3.3	13	2.5
Native Hawaiian/ Pacific Islander (only)	3	0.4	0	0.0	2	0.4
White (only)	468	58.1	192	62.7	314	60.6
Bi-Racial/Multi-Racial	77	9.6	31	10.1	51	9.8
Other – wrote in Hispanic/ Latino(a)	215	26.7	62	20.3	121	23.4
Maternal Primary Language						
English	642	79.8	245	80.1	415	80.1
Spanish	151	18.8	55	18.0	97	18.7
German	1	0.1	1	0.3	1	0.2
Other	3	0.4	1	0.3	1	0.2
Did not report	8	1.0	4	1.3	4	0.8
Maternal Nativity Status						
U.S. Born	549	68.2	215	70.3	371	71.6
Foreign Born	188	23.4	76	24.8	119	23.0
Did not report	68	8.4	15	4.9	28	5.4
Maternal Generational Status						
Born outside the U.S.	188	23.4	46	15.0	120	23.2
Born in the U.S. to immigrant parents	235	29.2	49	16.0	162	31.3
Both mother and mother’s parents born in the U.S.; immigrant grandparents	143	17.8	89	29.1	100	19.3
Mother, mother’s parents, and mother’s grandparents born in the U.S.	154	19.1	122	39.9	99	19.1

Did not report	85	10.6	0	0.0	37	7.1
Maternal Age Group						
18–24 years old	45	5.6	14	4.6	26	5.0
25–30 years old	196	24.3	69	22.5	115	22.2
31–35 years old	223	27.7	85	27.8	147	28.4
36–40 years old	166	20.6	66	21.6	109	21.0
41–45 years old	72	8.9	25	8.2	41	7.9
46–50 years old	10	1.2	2	0.7	5	1.0
51–55 years old	4	0.5	1	0.3	3	0.6
Did not report	89	11.1	44	14.4	72	13.9
Maternal Highest Degree or Certification						
Less than high school	9	1.1	2	0.7	4	0.8
Some high school	9	1.1	2	0.7	7	1.4
High school diploma or equivalency (GED)	84	10.4	36	11.8	67	12.9
Some college	160	19.9	59	19.3	124	23.9
Associate's degree	63	7.8	25	8.2	53	10.2
Bachelor's degree	179	22.2	73	23.9	132	25.5
Master's degree	100	12.4	39	12.7	76	14.7
Doctorate or professional (PhD, MD, JD, DDS, etc.)	20	2.5	10	3.3	18	3.5
Other	8	1.0	4	1.3	8	1.5
Did not report	173	21.5	56	18.3	29	5.6
Maternal Employment Status						
Pre-Pandemic Employed	482	59.9	186	60.8	310	59.8
Pre-Pandemic Not Employed	231	28.7	83	27.1	142	27.4
Did not report	92	11.4	37	12.1	66	12.7
Family Pre-Pandemic Poverty Level						
At or below 200% FPL	299	37.1	111	36.3	195	37.6
200%–400% FPL	215	26.7	81	26.5	135	26.1
Above 400% FPL	170	21.1	64	20.9	106	20.5
Did not report	121	15.0	50	16.3	82	15.8
Family Structure						
Dual-Parent Household	687	85.3	267	87.3	461	89.0
Non-Dual-Parent Household	88	10.9	33	10.8	44	8.5
Did not report	30	3.7	6	2.0	13	2.5
Number of People in Home						
1	5	0.6	2	0.7	2	0.4

2	27	3.4	10	3.3	15	2.9
3	228	28.3	94	30.7	153	29.5
4	267	33.2	107	35.0	169	32.6
5	163	20.2	47	15.4	97	18.7
6	70	8.7	28	9.2	50	9.7
7	26	3.2	11	3.6	19	3.7
8	16	2.0	6	2.0	11	2.1
9	3	0.4	1	0.3	2	0.4
Number of Children in Home						
1	279	34.7	118	38.6	183	35.3
2	293	36.4	116	37.9	185	35.7
3	141	17.5	39	12.7	84	16.2
4	54	6.7	22	7.2	42	8.1
5	23	2.9	7	2.3	15	2.9
6	12	1.5	2	0.7	6	1.2
7	1	0.1	1	0.3	1	0.2
8	2	0.2	1	0.3	2	0.4
Region						
Northeast	93	11.6	46	15.0	59	11.4
Midwest	123	15.3	49	16.0	80	15.4
South	278	34.5	89	29.1	170	32.8
West	311	38.6	122	39.9	209	40.3

Appendix B

Survey Questions Used

Constructs		Questions	Responses & Coding
Material Hardship		<p>One item from the one item adapted from the Institute of Medicine financial strain scale (IOM, 2014)</p> <p>Which of these needs have been hard to pay for in the past month? Select all that apply.</p> <ul style="list-style-type: none"> - Food - Housing - Utilities (electric, water, trash, etc.) - Healthcare - Childcare - Social and Emotional 	<p>1 = Yes; 0 = No</p> <p>Material hardship was calculated by the total number of needs that the family had a difficult time paying</p>
Maternal Stress	Parenting Stress	<p>Three items were derived from the Parenting Stress Index-Short Form (PSI-SF)</p> <p>In the last month</p> <ul style="list-style-type: none"> - I often have the feeling I cannot handle things very well - Being a parent is manageable, and any problems are easily solved - When you felt overwhelmed or stressed as a parent, did you get the support you needed? 	<p>For each item:</p> <p>1 - Strongly disagree, 2 - Somewhat disagree, 3 - Not sure, 4 - Somewhat agree, 5 - Strongly agree</p>
	Psychological Distress	<p><u>Depressive Symptoms</u></p> <p>Two items from the Patient Health Questionnaire – 2 (PHQ)</p> <p>During an average week, how often were you bothered by the following problems?</p> <ul style="list-style-type: none"> - Little interest or pleasure in doing things - Feeling down, depressed, or hopeless <p><u>Anxiety Symptoms</u></p> <p>Two items from the Generalized Anxiety Disorder 2-item scale (GAD-2)</p> <p>During an average week, how often were you bothered by the following problems?</p> <ul style="list-style-type: none"> - Feeling nervous, anxious, or on edge - Not being able to stop or control worrying 	<p><u>Depressive Symptoms</u></p> <p>0 = Not at all; 1 = Several days; 2 = More than half of the days; 3 = Nearly every day.</p> <p><u>Anxiety Symptoms</u></p> <p>0 = Not at all; 1 = Several days; 2 = More than half of the days; 3 = Nearly every day</p> <p><u>Loneliness</u></p>

		<p><u>Loneliness</u> One item from the NIH Toolbox item bank version 2.0 (Gershon et al., 2013) - I feel lonely</p> <p><u>Perceived Stress</u> One item developed by Eleo and colleagues (2003) Stress means a situation in which a person feels tense, restless, nervous or anxious or is unable to sleep at night because his/her mind is troubled all the time. Did you feel this kind of stress?</p>	<p>0 – Never, 1 – Rarely, 2 – Sometimes, 3 – Usually, 4 - Always</p> <p><u>Perceived Stress</u> 0 = Not at all; 1; 2; 3; 4 = Very much</p>
Children’s Behavioral Problems	Externalizing	<p>One item from the Child Behavior Checklist (CBCL) Please select the answer which best fits your child's behavior: - Fussy or defiant</p>	<p>0 = Not true; 1 = Somewhat /Sometimes True; 2 = Often true/ Very true</p>
	Internalizing	<p>One item from the Child Behavior Checklist (CBCL³) Please select the answer which best fits your child's behavior: - Too fearful or anxious</p>	
Intrafamily Conflict	Interparental Conflict	<p>Three items from a short form of the revised Conflict Tactics Scale (CTS; Straus & Douglas, 2004)</p> <p>In the last week</p> <ul style="list-style-type: none"> - I insulted or swore or shouted or yelled at my partner - I felt like throwing things or slamming doors - My partner insulted or swore or shouted or yelled at me - 	<p>0 - This has not happened 1 - Once per week 2 - Twice per week 3 - 3-5 times per week 4 - 6-10 times per week 5 - More than 10 times per week</p>
	Parent Child Conflict	<p>Four items from the Parent-Child Conflict Tactics Scales (CTSPC; Straus et al., 1998)</p> <p>In the last week</p> <ul style="list-style-type: none"> - I shouted, yelled, or screamed at my child - I criticized or said mean things to my child 	

		<ul style="list-style-type: none"> - My child had a temper tantrum - My child argued with me 	
Maternal Experience of Racism and Discrimination		<p>Twelve items from adapted versions of the Major Experiences of Discrimination (Williams et al., 2008) and the Telephone-Administered Perceived Racism Scale (Vines et al., 2001)</p> <p>Please indicate whether you have experienced any of the following in the past month.</p> <ul style="list-style-type: none"> - Have you ever received service from someone such as a plumber or car mechanic that was worse than what other people get because of your race or ethnicity? - Have you ever been denied service because of your race or ethnicity? - Have you ever been unfairly stopped, searched, questioned, physically threatened, or abused by the police because of your race or ethnicity? - At any time in your life, have you ever been unfairly fired because of your race or ethnicity? - For unfair reasons, have you ever not been hired for a job because of your race or ethnicity? - Have you ever been unfairly denied a promotion because of your race or ethnicity? - Have you ever been unfairly discouraged by a teacher or advisor from continuing your education because of your race or ethnicity? - Have you ever been unfairly prevented from moving into a neighborhood because the landlord or realtor refused to sell or rent you a house or apartment because of your race or ethnicity? - Have you ever moved into a neighborhood where neighbors made life difficult for you or your family because of your race or ethnicity? - Have you ever been unfairly denied a bank loan because of your race or ethnicity? 	1 = Yes; 0 = No

	<ul style="list-style-type: none"> - Have you ever been denied medical service because of your race or ethnicity? - Have you ever been called an insulting and derogatory term because of your race or ethnicity? 	
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Appendix C

Socio-Demographics For The Qualitative Sample

	N	%
Maternal Gender		
Female/ Transgender Female	40	100
Maternal Ethnicity		
Hispanic/Latino(a)	40	100
Maternal Race		
Native American/Alaska Native (only)	2	5
Asian (only)	0	0
Black/African American (only)	2	5
Native Hawaiian/ Pacific Islander (only)	0	0
White (only)	19	47.5
Bi-Racial/Multi-Racial	4	10
Other – wrote in Hispanic/ Latino(a)	13	32.5
Maternal Primary Language		
English	33	82.5
Spanish	7	17.5
Maternal Nativity status		
U.S. Born	27	67.5
Foreign Born	11	27.5
Did not report	2	5
Maternal Generational Status		
Born outside the U.S.	11	27.5
Born in the U.S. to immigrant parents	9	22.5
Both mother and mother’s parents born in the U.S.; immigrant grandparents	12	30
Mother, mother’s parents, and mother’s grandparents born in the U.S.	5	12.5
Did not report	3	7.5

Maternal Age Group		
18–24 years old	2	5
25–30 years old	15	37.5
31–35 years old	14	35
36–40 years old	6	15
41–45 years old	3	7.5
46–50 years old	0	0
51–55 years old	0	0
Did not report	0	0
Maternal Highest Degree or Certification		
Less than high school	1	2.5
Some high school	0	0
High school diploma or equivalency (GED)	3	7.5
Some college	5	12.5
Associate's degree	5	12.5
Bachelor's degree	11	27.5
Master's degree	2	5
Doctorate or professional (PhD, MD, JD, DDS, etc.)	0	0
Did not report	13	32.5
Maternal Employment Status		
Pre-Pandemic Employed	17	42.5
Pre-Pandemic Not Employed	8	20
Missing Pre-pandemic	15	37.5
Family Pre-Pandemic Poverty Level		
At or below 200% FPL	17	42.5
200%–400% FPL	13	32.5
Above 400% FPL	9	22.5
Did not report	1	2.5
Family Structure		
Dual-Parent Household	35	87.5
Non-Dual-Parent Household	4	10
Did not report	1	2.5
Number of People in Home		
2	1	2.5
3	9	22.5
4	11	27.5
5	12	30
6	5	12.5

7	2	5
Number of Children in Home		
1	12	30
2	11	27.5
3	11	27.5
4	4	10
5	2	5

REFERENCES CITED

- Abidin, R. R. (1990). *Parenting Stress Index* [dataset]. <https://doi.org/10.1037/t02445-000>
- Achenbach, T. M. (2001). Manual for ASEBA school-age forms & profiles. *University of Vermont, Research Center for Children, Youth & Families*.
- Acri, M. C., & Hoagwood, K. E. (2015). Addressing parental mental health within interventions for children: A review. *Research on Social Work Practice, 25*(5), 578–586.
- Albers, C. A., & Kratochwill, T. R. (2010). Design of Experiments. In *International Encyclopedia of Education* (pp. 125–131). Elsevier. <https://doi.org/10.1016/B978-0-08-044894-7.01380-4>
- American Psychological Association. (2018). Psychological distress. In *APA dictionary of psychology*. <https://dictionary.apa.org/psychological-distress>
- Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., & Shaffer, S. (2005). The relationships between parenting stress, parenting behaviour and preschoolers' social competence and behaviour problems in the classroom. *Infant and Child Development, 14*(2), 133–154. <https://doi.org/10.1002/icd.385>
- Anzaldúa, G. (1987). *Borderlands: La Frontera. The New Mestiza*. (1st ed). Spinsters/Aunt Lute.
- Aranda, M. P., Castaneda, I., Lee, P.-J., & Sobel, E. (2001). Stress, social support, and coping as predictors of depressive symptoms: Gender differences among Mexican Americans. *Social Work Research, 25*(1), 37–48. <https://doi.org/10.1093/swr/25.1.37>
- Arbona, C., Olvera, N., Rodriguez, N., Hagan, J., Linares, A., & Wiesner, M. (2010). Acculturative Stress Among Documented and Undocumented Latino Immigrants in the United States. *Hispanic Journal of Behavioral Sciences, 32*(3), 362–384. <https://doi.org/10.1177/0739986310373210>
- Baquero, B., Gonzalez, C., Ramirez, M., Chavez Santos, E., & Ornelas, I. J. (2020). Understanding and Addressing Latinx COVID-19 Disparities in Washington State. *Health Education & Behavior, 47*(6), 845–849. <https://doi.org/10.1177/1090198120963099>
- Bécares, L., Nazroo, J., & Kelly, Y. (2015). A longitudinal examination of maternal, family, and area-level experiences of racism on children's socioemotional development: Patterns and possible explanations. *Social Science & Medicine, 142*, 128–135. <https://doi.org/10.1016/j.socscimed.2015.08.025>
- Bernal, D. D. (1998). Using a Chicana Feminist Epistemology in Educational Research. *Harvard Educational Review, 68*(4), 555–583. <https://doi.org/10.17763/haer.68.4.5wv1034973g22q48>

- Beverly, S. G. (2001). Measures of Material Hardship: Rationale and Recommendations. *Journal of Poverty*, 5(1), 23–41. https://doi.org/10.1300/J134v05n01_02
- Boyer, C. J., Ugarte, E., Buhler-Wassmann, A. C., & Hibel, L. C. (2023). Latina mothers navigating COVID -19: Within- and between-family stress processes over time. *Family Relations*, 72(1), 23–39. <https://doi.org/10.1111/fare.12748>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological*. (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Broderick, C.B. (1993). *Understanding family process: Basics of family systems theory*. Sage Publications, Inc.
- Brown, S. M., Doom, J. R., Lechuga-Peña, S., Watamura, S. E., & 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>
- Caballero, C., Martínez-Vu, Y., Pérez-Torres, J., Téllez, M., & Vega, C. (Eds.). (2019). *The Chicana Motherwork Anthology*. University of Arizona Press. <https://doi.org/10.2307/j.ctvcj2hz5>
- Cardoso, J. B., & Thompson, S. J. (2010). Common Themes of Resilience among Latino Immigrant Families: A Systematic Review of the Literature. *Families in Society: The Journal of Contemporary Social Services*, 91(3), 257–265. <https://doi.org/10.1606/1044-3894.4003>
- Castillo, L. G., Perez, F. V., Castillo, R., & Ghosheh, M. R. (2010). Construction and initial validation of the Marianismo Beliefs Scale. *Counselling Psychology Quarterly*, 23(2), 163–175. <https://doi.org/10.1080/09515071003776036>
- Center for Disease Control and Prevention. (2020). *Demographic trends of COVID-19 cases and deaths in the US reported to CDC*. <https://covid.cdc.gov/covid-datatracker/#demographics>.
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297–298. <https://doi.org/10.1080/17439760.2016.1262613>

- Cleary, S. D., Snead, R., Dietz-Chavez, D., Rivera, I., & Edberg, M. C. (2018). Immigrant Trauma and Mental Health Outcomes Among Latino Youth. *Journal of Immigrant and Minority Health, 20*(5), 1053–1059. <https://doi.org/10.1007/s10903-017-0673-6>
- Collado, A., Lim, A. C., & MacPherson, L. (2016). A systematic review of depression psychotherapies among Latinos. *Clinical Psychology Review, 45*, 193–209. <https://doi.org/10.1016/j.cpr.2016.04.001>
- Collins, P. H. (2016). Shifting the center: Race, class, and feminist theorizing about motherhood. In *Mothering* (pp. 45–65). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315538891-4/shifting-center-race-class-feminist-theorizing-motherhood-patricia-hill-collins>
- Condon, E. M., Londono Tobon, A., Jackson, B., Holland, M. L., Slade, A., Mayes, L., & Sadler, L. S. (2021). Maternal Experiences of Racial Discrimination, Child Indicators of Toxic Stress, and the Minding the Baby Early Home Visiting Intervention. *Nursing Research, 70*(5S), S43–S52. <https://doi.org/10.1097/NNR.0000000000000529>
- Conger, R. D., Ge, X., Elder, Glen H, Lorenz, Frederick O, & Simons, Ronald L. (1994). Economic Stress, Coercive Family Process, and Developmental Problems of Adolescents. *Child Development, 22*.
- Cuijpers, P., Weitz, E., Karyotaki, E., Garber, J., & Andersson, G. (2015). The effects of psychological treatment of maternal depression on children and parental functioning: A meta-analysis. *European Child & Adolescent Psychiatry, 24*(2), 237–245. <https://doi.org/10.1007/s00787-014-0660-6>
- Cummings, E. M., Davies, P. T., & Campbell, S. B. (2020). *Developmental Psychopathology and Family Process: Theory, Research, and Clinical Implications*. Guilford Publications.
- Czeisler, M. É., Lane, R. I., Petrosky, E., Wiley, J. F., Christensen, A., Njai, R., Weaver, M. D., Robbins, R., Facer-Childs, E. R., Barger, L. K., Czeisler, C. A., Howard, M. E., & Rajaratnam, S. M. W. (2020). Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic—United States, June 24–30, 2020. *MMWR. Morbidity and Mortality Weekly Report, 69*(32), 1049–1057. <https://doi.org/10.15585/mmwr.mm6932a1>
- Davies, P. T., Harold, G. T., Goeke-Morey, M. C., Cummings, E. M., Sheldon, K., Rasi, J. A., & Jenkins, J. M. (2002). Child emotional security and interparental conflict. *Monographs of the Society for Research in Child Development*.
- Deater-Deckard, K. (1998). Parenting stress and child adjustment: Some old hypotheses and new questions. *Clinical Psychology: Science and Practice, 5*(3), 314–332. <https://doi.org/10.1111/j.1468-2850.1998.tb00152.x>

- Deater-Deckard, K. (2008). *Parenting Stress*. Yale University Press.
<https://doi.org/10.12987/9780300133936>
- Drotning, K. J., Doan, L., Sayer, L. C., Fish, J. N., & Rinderknecht, R. G. (2023). Not All Homes Are Safe: Family Violence Following the Onset of the Covid-19 Pandemic. *Journal of Family Violence*, 38(2), 189–201. <https://doi.org/10.1007/s10896-022-00372-y>
- Elo, A.-L., Leppänen, A., & Jahkola, A. (2003). Validity of a single-item measure of stress symptoms. *Scandinavian Journal of Work, Environment & Health*, 29(6), 444–451. <https://doi.org/10.5271/sjweh.752>
- English, D. J., Marshall, D. B., & Stewart, A. J. (2003). Effects of family violence on child behavior and health during early childhood. *Journal of Family Violence*, 18(1), 43–57. <https://doi.org/10.1023/A:1021453431252>
- Enid Zambrana, R., Amaro, G., Butler, C., DuPont-Reyes, M., & Parra-Medina, D. (2021). Analysis of Latina/o Sociodemographic and Health Data Sets in the United States From 1960 to 2019: Findings Suggest Improvements to Future Data Collection Efforts. *Health Education & Behavior*, 48(3), 320–331. <https://doi.org/10.1177/10901981211011047>
- Everett, Y., Martin, C. G., & Zalewski, M. (2021). A Systematic Review Focusing on Psychotherapeutic Interventions that Impact Parental Psychopathology, Child Psychopathology and Parenting Behavior. *Clinical Child and Family Psychology Review*, 24(3), 579–598. <https://doi.org/10.1007/s10567-021-00355-3>
- Flores, E., Tschann, J. M., Dimas, J. M., Pasch, L. A., & de Groat, C. L. (2010). Perceived racial/ethnic discrimination, posttraumatic stress symptoms, and health risk behaviors among Mexican American adolescents. *Journal of Counseling Psychology*, 57(3), 264–273. <https://doi.org/10.1037/a0020026>
- Gallo, L. C., Penedo, F. J., Espinosa de los Monteros, K., & Arguelles, W. (2009). Resiliency in the Face of Disadvantage: Do Hispanic Cultural Characteristics Protect Health Outcomes? *Journal of Personality*, 77(6), 1707–1746. <https://doi.org/10.1111/j.1467-6494.2009.00598.x>
- Garcia, J., Vargas, N., de la Torre, C., Magana Alvarez, M., & Clark, J. L. (2021). Engaging Latino Families About COVID-19 Vaccines: A Qualitative Study Conducted in Oregon, USA. *Health Education & Behavior*, 48(6), 747–757. <https://doi.org/10.1177/10901981211045937>
- Germán, M., Gonzales, N. A., & Dumka, L. (2009). Familism Values as a Protective Factor for Mexican-Origin Adolescents Exposed to Deviant Peers. *The Journal of Early Adolescence*, 29(1), 16–42. <https://doi.org/10.1177/0272431608324475>

- Gershon, R. C., Wagster, M. V., Hendrie, H. C., Fox, N. A., Cook, K. F., & Nowinski, C. J. (2013). NIH Toolbox for Assessment of Neurological and Behavioral Function. *Neurology*, *80*(Issue 11, Supplement 3), S2–S6. <https://doi.org/10.1212/WNL.0b013e3182872e5f>
- Goodman, S. H., & Gotlib, I. H. (1999). *Risk for Psychopathology in the Children of Depressed Mothers: A Developmental Model for Understanding Mechanisms of Transmission*. 33.
- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal Depression and Child Psychopathology: A Meta-Analytic Review. *Clinical Child and Family Psychology Review*, *14*(1), 1–27. <https://doi.org/10.1007/s10567-010-0080-1>
- Goodman, S. H., Simon, H. F. M., Shambraw, A. L., & Kim, C. Y. (2020). Parenting as a Mediator of Associations between Depression in Mothers and Children’s Functioning: A Systematic Review and Meta-Analysis. *Clinical Child and Family Psychology Review*, *23*(4), 427–460. <https://doi.org/10.1007/s10567-020-00322-4>
- Goodman, S. H. & Tully, Erin C. (2006). Depression in Women Who Are Mothers: An Integrative Model of Risk for the Development of Psychopathology in Their Sons and Daughters. In *Women and depression: A handbook for the social, behavioral, and biomedical sciences*. Cambridge University Press. <https://www.annualreviews.org/doi/10.1146/annurev.clinpsy.3.022806.091401>
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). *Toward a Conceptual Framework for Mixed-Method Evaluation Designs*. 21.
- Hamel, L., & Salganicoff, A. (2020). *Is there a widening gender gap in coronavirus stress?* Kaiser Family Foundation. <https://www.kff.org/policy-watch/is-there-widening-gender-gap-in-coronavirus-stress/>
- Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry*, *70*(1), 42–57. <https://doi.org/10.1037/h0087722>
- Harris, R. A., & Santos, H. P. (2020). Maternal depression in Latinas and child socioemotional development: A systematic review. *PLOS ONE*, *15*(3), e0230256. <https://doi.org/10.1371/journal.pone.0230256>
- Hass, G. A., Dutton, M. A., & Orloff, L. E. (2000). Lifetime Prevalence of Violence Against Latina Immigrants: Legal and Policy Implications. *International Review of Victimology*, *7*(1–3), 93–113. <https://doi.org/10.1177/026975800000700306>
- Heard-Garris, N. J., Cale, M., Camaj, L., Hamati, M. C., & Dominguez, T. P. (2018). Transmitting Trauma: A systematic review of vicarious racism and child health. *Social Science & Medicine*, *199*, 230–240. <https://doi.org/10.1016/j.socscimed.2017.04.018>

- Hibel, L. C., Boyer, C. J., Buhler-Wassmann, A. C., & Shaw, B. J. (2021). The psychological and economic toll of the COVID-19 pandemic on Latina mothers in primarily low-income essential worker families. *Traumatology*, 27(1), 40–47. <https://doi.org/10.1037/trm0000293>
- Hibel, L.C., Boyer, C.J., Buhler-Wassmann, A.C., & Shaw, B.J. (2021). *Low-Income Latina Mothers Need Protection from Pandemic's Economic and Psychological Strain* (Center for Poverty & Inequality Research, p. 2) [Policy Brief]. University of California Davis. https://poverty.ucdavis.edu/sites/main/files/file-attachments/hibel_covid_latina_mothers_brief.pdf
- Hovey, J. D. (2000). Acculturative stress, depression, and suicidal ideation in Mexican immigrants. *Cultural Diversity and Ethnic Minority Psychology*, 6(2), 134–151. <https://doi.org/10.1037/1099-9809.6.2.134>
- Huth-Bocks, A. C., Levendosky, A. A., & Semel, M. A. (2001). The Direct and Indirect Effects of Domestic Violence on Young Children's Intellectual Functioning. *Journal of Family Violence*, 16(3), 269–290. <https://doi.org/10.1023/A:1011138332712>
- Institute of Medicine (US). Committee on the Recommended Social and Behavioral Domains and Measures for Electronic Health Records. (2014). Capturing social and behavioral domains in electronic health records: Phase 2. *National Academies Press*.
- Iruka, I. U., Gardner-Neblett, N., Telfer, N. A., Ibekwe-Okafor, N., Curenton, S. M., Sims, J., Sansbury, A. B., & Neblett, E. W. (2022). Effects of Racism on Child Development: Advancing Antiracist Developmental Science. *Annual Review of Developmental Psychology*, 4(1), 109–132. <https://doi.org/10.1146/annurev-devpsych-121020-031339>
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14–26. <https://doi.org/10.3102/0013189X033007014>
- Jones, J. H., Call, T. A., Wolford, S. N., & McWey, L. M. (2021). Parental Stress and Child Outcomes: The Mediating Role of Family Conflict. *Journal of Child and Family Studies*, 30(3), 746–756. <https://doi.org/10.1007/s10826-021-01904-8>
- Kalil, A., & DeLeire, T. (2004). *Family Investments in Children's Potential: Resources and Parenting Behaviors That Promote Success*. Psychology Press.
- Kerig, P. K. (2016). Family Systems from a Developmental Psychopathology Perspective. In D. Cicchetti (Ed.), *Developmental Psychopathology* (pp. 1–51). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119125556.devpsy113>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2002). *The Patient Health Questionnaire-2: Validity of a Two-Item Depression Screener*. 41(11), 10.

- Kroenke, K., Spitzer, R. L., Williams, J. B. W., Monahan, P. O., & Löwe, B. (2007). Anxiety Disorders in Primary Care: Prevalence, Impairment, Comorbidity, and Detection. *Annals of Internal Medicine*, *146*(5), 317. <https://doi.org/10.7326/0003-4819-146-5-200703060-00004>
- Kuhlberg, J. A., Peña, J. B., & Zayas, L. H. (2010). Familism, Parent-Adolescent Conflict, Self-Esteem, Internalizing Behaviors and Suicide Attempts Among Adolescent Latinas. *Child Psychiatry & Human Development*, *41*(4), 425–440. <https://doi.org/10.1007/s10578-010-0179-0>
- Laria, A. J., & Lewis-Fernández, R. (2006). Latino patients. *Clinical manual of cultural psychiatry*, 119-173.
- Letourneau, N. L., Duffett-Leger, L., Levac, L., Watson, B., & Young-Morris, C. (2011). Socioeconomic Status and Child Development: A Meta-Analysis. *Journal of Emotional and Behavioral Disorders*, *21*(3), 211–224. <https://doi.org/10.1177/1063426611421007>
- Lewandowski, A. S., Palermo, T. M., Stinson, J., Handley, S., & Chambers, C. T. (2010). Systematic Review of Family Functioning in Families of Children and Adolescents With Chronic Pain. *The Journal of Pain*, *11*(11), 1027–1038. <https://doi.org/10.1016/j.jpain.2010.04.005>
- Lim, R. F. (Ed.). (2015). Issues in the Assessment and Treatment of Latino Parents. In *Clinical manual of cultural psychiatry* (Second edition). American Psychiatric Publishing.
- Liu, L., & Wang, M. (2015). Parenting stress and children’s problem behavior in China: The mediating role of parental psychological aggression. *Journal of Family Psychology*, *29*(1), 20–28. <https://doi.org/10.1037/fam0000047>
- Liu, S., & Fisher, P. A. (2022). Early experience unpredictability in child development as a model for understanding the impact of the COVID-19 pandemic: A translational neuroscience perspective. *Developmental Cognitive Neuroscience*, *54*, 101091. <https://doi.org/10.1016/j.dcn.2022.101091>
- Liu, S., Zalewski, M., Lengua, L., Gunnar, M. R., Giuliani, N., & Fisher, P. A. (2022). Material hardship level and unpredictability in relation to U.S. households’ family interactions and emotional well-being: Insights from the COVID-19 pandemic. *Social Science & Medicine*, *307*, 115173. <https://doi.org/10.1016/j.socscimed.2022.115173>
- Lopez-Baez, S.I. (2006). Counseling Latinas: Culturally responsive interventions. In *Multicultural issues in counseling* (3rd ed., pp. 257–267).
- Lorenzo-Blanco, E. I., & Cortina, L. M. (2013). Towards an integrated understanding of Latino/a acculturation, depression, and smoking: A gendered analysis. *Journal of Latina/o Psychology*, *1*(1), 3–20. <https://doi.org/10.1037/a0030951>

- Mackler, J. S., Kelleher, R. T., Shanahan, L., Calkins, S. D., Keane, S. P., & O'Brien, M. (2015). Parenting Stress, Parental Reactions, and Externalizing Behavior From Ages 4 to 10. *Journal of Marriage and Family*, 77(2), 388–406. <https://doi.org/10.1111/jomf.12163>
- Madigan, S., Oatley, H., Racine, N., Fearon, R. M. P., Schumacher, L., Akbari, E., Cooke, J. E., & Tarabulsky, G. M. (2018). A Meta-Analysis of Maternal Prenatal Depression and Anxiety on Child Socioemotional Development. *Journal of the American Academy of Child & Adolescent Psychiatry*, 57(9), 645–657.e8. <https://doi.org/10.1016/j.jaac.2018.06.012>
- Margolin, G., & Vickerman, K. A. (2007). Posttraumatic stress in children and adolescents exposed to family violence: I. Overview and issues. *Professional Psychology: Research and Practice*, 38(6), 613–619. <https://doi.org/10.1037/0735-7028.38.6.613>
- Marsiglia, F. F., Kulis, S., Perez, H. G., & Bermudez-Parsai, M. (2011). Hopelessness, Family Stress, and Depression among Mexican-Heritage Mothers in the Southwest. *Health & Social Work*, 36(1), 7–18. <https://doi.org/10.1093/hsw/36.1.7>
- Martin, M. J., Conger, R. D., & Robins, R. W. (2019). Family stress processes and drug and alcohol use by Mexican American adolescents. *Developmental Psychology*, 55(1), 170–183. <https://doi.org/10.1037/dev0000629>
- Martin Romero, M. Y., Gonzalez, L. M., Stein, G. L., Alvarado, S., Kiang, L., & Coard, S. I. (2022). Coping (together) with hate: Strategies used by Mexican-origin families in response to racial–ethnic discrimination. *Journal of Family Psychology*, 36(1), 3–12. <https://doi.org/10.1037/fam0000760>
- 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>
- McLeod, J. D., & Shanahan, M. J. (1993). Poverty, Parenting, and Children's Mental Health. *American Sociological Review*, 58(3), 351. <https://doi.org/10.2307/2095905>
- Mehring, W. M., Kim, J. S., Hendel, C., & Hochman, M. (2021). COVID-19 Exposure Risk by Speakers of Spanish and English Using a Web-Based Self-assessment Tool. *Journal of General Internal Medicine*, 36(6), 1835–1836. <https://doi.org/10.1007/s11606-021-06756-y>
- Menjívar, C. (2000). *Fragmented ties: Salvadoran immigrant networks in America*. University of California Press.
- Moore, C. G., Probst, J. C., Tompkins, M., Cuffe, S., & Martin, A. B. (2007). The Prevalence of Violent Disagreements in US Families: Effects of Residence, Race/Ethnicity, and Parental Stress. *Pediatrics*, 119(Supplement_1), S68–S76. <https://doi.org/10.1542/peds.2006-2089K>

- Moreira da Silva, J. (2019). *Why you should care about unpaid care work*. OECD Development Matters. <https://oecd-development-matters.org/2019/03/18/why-you-should-care-about-unpaid-care-work/>
- Non, A. L., Clausing, E. S., Lara-Cinisomo, S., & D'Anna Hernandez, K. L. (2023). COVID-19-Related Risk, Resilience, and Mental Health Among Mexican American Mothers Across the First Year of the Pandemic. *Journal of Racial and Ethnic Health Disparities*. <https://doi.org/10.1007/s40615-023-01849-2>
- Oregon Health Authority. (2021). *COVID-19 weekly report*. <https://www.oregon.gov/oha/covid19/Documents/DataReports/COVID-19-Weekly-Report-2021-1-13-FINAL.pdf>
- Östberg, M., & Hagekull, B. (2000). A Structural Modeling Approach to the Understanding of Parenting Stress. *Journal of Clinical Child Psychology*, 29(4), 615–625. https://doi.org/10.1207/S15374424JCCP2904_13
- Palermo, F., Ispa, J. M., Carlo, G., & Streit, C. (2018). Economic hardship during infancy and U.S. Latino preschoolers' sociobehavioral health and academic readiness. *Developmental Psychology*, 54(5), 890–902. <https://doi.org/10.1037/dev0000476>
- Peltz, J. S., Crasta, D., Daks, J. S., & Rogge, R. D. (2021). Shocks to the system: The influence of COVID-19–related stressors on coparental and family functioning. *Developmental Psychology*, 57(10), 1693–1707. <https://doi.org/10.1037/dev0001206>
- Pew Research Center. (2019). *Facts on Latinos in the U.S.* [Fact Sheet]. <https://www.pewresearch.org/hispanic/fact-sheet/latinos-in-the-u-s-fact-sheet/>
- Pew Research Center (2020). *Coronavirus economic downturn has hit Latinos especially hard*. <https://www.pewresearch.org/hispanic/2020/08/04/coronavirus-economic-downturn-has-hit-latinos-especially-hard/>
- Pew Research Center. (2021). *Half of U.S Latinos experienced some form of discrimination during the first year of the pandemic*. <https://www.pewresearch.org/hispanic/2021/11/04/half-of-u-s-latinos-experienced-some-form-of-discrimination-during-the-first-year-of-the-pandemic/>
- Pew Research Center. (2023a). *Key facts about U.S. Latinos for National Hispanic Heritage Month*. <https://www.pewresearch.org/short-reads/2023/09/22/key-facts-about-us-latinos-for-national-hispanic-heritage-month/#:~:text=Among%20the%20U.S.,to%2039.3%20million%20in%202021.>
- Pew Research Center. (2023b). *Latinos' Views of and Experiences With the Spanish Language*. <https://www.pewresearch.org/race-ethnicity/2023/09/20/latinos-views-of-and-experiences-with-the-spanish->

[language/#:~:text=Most%20U.S.%20Latinos%20speak%20Spanish,United%20States%20to%20speak%20Spanish.](#)

- Poulson, M., Neufeld, M., Geary, A., Kenzik, K., Sanchez, S. E., Dechert, T., & Kimball, S. (2021). Intersectional Disparities Among Hispanic Groups in COVID-19 Outcomes. *Journal of Immigrant and Minority Health, 23*(1), 4–10. <https://doi.org/10.1007/s10903-020-01111-5>
- Power, K. (2020). The COVID-19 pandemic has increased the care burden of women and families. *Sustainability: Science, Practice and Policy, 16*(1), 67–73. <https://doi.org/10.1080/15487733.2020.1776561>
- Priest, N., Paradies, Y., Trenerry, B., Truong, M., Karlsen, S., & Kelly, Y. (2013). A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people. *Social Science & Medicine, 95*, 115–127. <https://doi.org/10.1016/j.socscimed.2012.11.031>
- Prime, H., Wade, M., & Browne, D. T. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist, 75*(5), 631–643. <https://doi.org/10.1037/amp0000660>
- Quintana, S. M., & McKnown, C. (Eds.). (2008). *Handbook of race, racism, and the developing child*. John Wiley & Sons.
- Reitman, D., Currier, R. O., & Stickle, T. R. (2002). A Critical Evaluation of the Parenting Stress Index-Short Form (PSI-SF) in a Head Start Population. *Journal of Clinical Child & Adolescent Psychology, 31*(3), 384–392. https://doi.org/10.1207/S15374424JCCP3103_10
- Roberts, Y. H., Campbell, C. A., Ferguson, M., & Crusto, C. A. (2013). The Role of Parenting Stress in Young Children’s Mental Health Functioning After Exposure to Family Violence: Stress, Family Violence, and Child Functioning. *Journal of Traumatic Stress, 26*(5), 605–612. <https://doi.org/10.1002/jts.21842>
- Rodriguez, N., Mira, C. B., Paez, N. D., & Myers, H. F. (2007). Exploring the Complexities of Familism and Acculturation: Central Constructs for People of Mexican Origin. *American Journal of Community Psychology, 39*(1–2), 61–77. <https://doi.org/10.1007/s10464-007-9090-7>
- Saleem, F. T., Anderson, R. E., & Williams, M. (2020). Addressing the “Myth” of Racial Trauma: Developmental and Ecological Considerations for Youth of Color. *Clinical Child and Family Psychology Review, 23*(1), 1–14. <https://doi.org/10.1007/s10567-019-00304-1>
- Salgado de Snyder, V. N., McDaniel, M., Padilla, A. M., & Parra-Medina, D. (2021). Impact of COVID-19 on Latinos: A Social Determinants of Health Model and Scoping Review of

- the Literature. *Hispanic Journal of Behavioral Sciences*, 43(3), 174–203.
<https://doi.org/10.1177/07399863211041214>
- Sameroff, A. J., & Mackenzie, M. J. (2003). Research strategies for capturing transactional models of development: The limits of the possible. *Development and Psychopathology*, 15(3), 613–640. <https://doi.org/10.1017/S0954579403000312>
- Schenck-Fontaine, A., & Ryan, R. M. (2022). Poverty, Material Hardship, and Children’s Outcomes: A Nuanced Understanding of Material Hardship in Childhood. *Children*, 9(7), 981. <https://doi.org/10.3390/children9070981>
- Schwartz, S. J., Unger, J. B., Baezconde-Garbanati, L., Zamboanga, B. L., Lorenzo-Blanco, E. I., Des Rosiers, S. E., Romero, A. J., Cano, M. Á., Gonzales-Backen, M. A., Córdova, D., Piña-Watson, B. M., Huang, S., Villamar, J. A., Soto, D. W., Pattarroyo, M., & Szapocznik, J. (2015). Trajectories of Cultural Stressors and Effects on Mental Health and Substance Use Among Hispanic Immigrant Adolescents. *Journal of Adolescent Health*, 56(4), 433–439. <https://doi.org/10.1016/j.jadohealth.2014.12.011>
- Sharma, G., Volgman, A. S., & Michos, E. D. (2020). Sex Differences in Mortality From COVID-19 Pandemic. *JACC: Case Reports*, 2(9), 1407–1410. <https://doi.org/10.1016/j.jaccas.2020.04.027>
- Shattell, M. M., Smith, K. M., Quinlan-Colwell, A., & Villalba, J. A. (2008). Factors Contributing to Depression in Latinas of Mexican Origin Residing in the United States: Implications for Nurses. *Journal of the American Psychiatric Nurses Association*, 14(3), 193–204. <https://doi.org/10.1177/1078390308319034>
- Shorten, A., & Smith, J. (2017). Mixed methods research: Expanding the evidence base. *Evidence Based Nursing*, 20(3), 74–75. <https://doi.org/10.1136/eb-2017-102699>
- Slopen, N., Strizich, G., Hua, S., Gallo, L. C., Chae, D. H., Priest, N., Gurka, M. J., Bangdiwala, S. I., Bravin, J. I., Chambers, E. C., Daviglius, M. L., Llabre, M. M., Carnethon, M. R., & Isasi, C. R. (2019). Maternal experiences of ethnic discrimination and child cardiometabolic outcomes in the Study of Latino Youth. *Annals of Epidemiology*, 34, 52–57. <https://doi.org/10.1016/j.annepidem.2019.03.011>
- Spence, S. H., Najman, J. M., Bor, W., O’Callaghan, M. J., & Williams, G. M. (2002). Maternal anxiety and depression, poverty and marital relationship factors during early childhood as predictors of anxiety and depressive symptoms in adolescence. *Journal of Child Psychology and Psychiatry*, 43(4), 457–469. <https://doi.org/10.1111/1469-7610.00037>
- Strassle, P. D., Stewart, A. L., Quintero, S. M., Bonilla, J., Alhomsy, A., Santana-Ufret, V., Maldonado, A. I., Forde, A. T., & Nápoles, A. M. (2022). COVID-19–Related Discrimination Among Racial/Ethnic Minorities and Other Marginalized Communities in the United States. *American Journal of Public Health*, 112(3), 453–466. <https://doi.org/10.2105/AJPH.2021.306594>

- Straus, M. A., & Douglas, E. M. (2004). A Short Form of the Revised Conflict Tactics Scales, and Typologies for Severity and Mutuality. *Violence and Victims, 19*(5), 507–520. <https://doi.org/10.1891/vivi.19.5.507.63686>
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues, 17*(3), 283–316. <https://doi.org/10.1177/019251396017003001>
- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The New Era of Mixed Methods. *Journal of Mixed Methods Research, 1*(1), 3–7. <https://doi.org/10.1177/2345678906293042>
- Torres, L., Driscoll, M. W., & Voell, M. (2012). Discrimination, acculturation, acculturative stress, and Latino psychological distress: A moderated mediational model. *Cultural Diversity and Ethnic Minority Psychology, 18*(1), 17–25. <https://doi.org/10.1037/a0026710>
- United States Census Bureau. (2020a). *About Race*. <https://www.census.gov/topics/population/race/about.html>
- United States Census Bureau. (2020b). *Income and Poverty in the United States: 2019*. <https://www.census.gov/library/publications/2020/demo/p60-270.html>
- United States Census Bureau. (2020c). *QuickFacts: Oregon*. <https://www.census.gov/quickfacts/OR?>
- United States Census Bureau. (2021). *Racial and Ethnic Diversity in the United States: 2010 Census and 2020 Census*. <https://www.census.gov/library/visualizations/interactive/racial-and-ethnic-diversity-in-the-united-states-2010-and-2020-census.html>
- Valdez, C. R., Abegglen, J., & Hauser, C. T. (2013). Fortalezas Familiares Program: Building Sociocultural and Family Strengths in Latina Women with Depression and Their Families. *Family Process, 52*(3), 378–393. <https://doi.org/10.1111/famp.12008>
- Viertiö, S., Kiviruusu, O., Piirtola, M., Kaprio, J., Korhonen, T., Marttunen, M., & Suvisaari, J. (2021). Factors contributing to psychological distress in the working population, with a special reference to gender difference. *BMC Public Health, 21*(1), 611. <https://doi.org/10.1186/s12889-021-10560-y>
- Vines, A. I., McNeilly, M. D., Stevens, J., Hertz-Picciotto, I., Bohlig, M., & Baird, D. D. (2001). Development and reliability of a Telephone-Administered Perceived Racism Scale (TPRS): a tool for epidemiological use. *Ethnicity & disease, 11*(2), 251.

- Vora, K. (2012). Limits of “Labor”: Accounting for Affect and the Biological in Transnational Surrogacy and Service Work. *South Atlantic Quarterly*, *111*(4), 681–700. <https://doi.org/10.1215/00382876-1724138>
- Wade, M., Prime, H., Johnson, D., May, S. S., Jenkins, J. M., & Browne, D. T. (2021). The disparate impact of COVID-19 on the mental health of female and male caregivers. *Social Science & Medicine*, *275*, 113801. <https://doi.org/10.1016/j.socscimed.2021.113801>
- White, R. M. B., Liu, Y., Nair, R. L., & Tein, J.-Y. (2015). Longitudinal and integrative tests of family stress model effects on Mexican origin adolescents. *Developmental Psychology*, *51*(5), 649–662. <https://doi.org/10.1037/a0038993>
- White, R. M. B., Roosa, M. W., Weaver, S. R., & Nair, R. L. (2009). Cultural and Contextual Influences on Parenting in Mexican American Families. *Journal of Marriage and Family*, *71*(1), 61–79. <https://doi.org/10.1111/j.1741-3737.2008.00580.x>
- Williams, D. R., Gonzalez, H. M., Williams, S., Mohammed, S. A., Moomal, H., & Stein, D. J. (2008). Perceived discrimination, race and health in South Africa. *Social Science & Medicine*, *67*(3), 441–452. <https://doi.org/10.1016/j.socscimed.2008.03.021>
- Xue, J., Chen, J., Chen, C., Hu, R., & Zhu, T. (2020). The Hidden Pandemic of Family Violence During COVID-19: Unsupervised Learning of Tweets. *Journal of Medical Internet Research*, *22*(11), e24361. <https://doi.org/10.2196/24361>
- Zalewski, M., Goodman, S. H., Cole, P. M., & McLaughlin, K. A. (2017). Clinical Considerations When Treating Adults Who Are Parents. *Clinical Psychology: Science and Practice*, *24*(4), 370–388. <https://doi.org/10.1111/cpsp.12209>
- Zalewski, M., Liu, S., Gunnar, M., Lengua, L. J., & Fisher, P. A. (2023). Mental-Health Trajectories of U.S. Parents With Young Children During the COVID-19 Pandemic: A Universal Introduction of Risk. *Clinical Psychological Science*, *11*(1), 183–196. <https://doi.org/10.1177/21677026221083275>
- Zimmerman, G. M., & Miller-Smith, A. (2022). The impact of anticipated, vicarious, and experienced racial and ethnic discrimination on depression and suicidal behavior among Chicago youth. *Social Science Research*, *101*, 102623. <https://doi.org/10.1016/j.ssresearch.2021.102623>