THE ROLE OF STATE-LEVEL PAID FAMILY LEAVE FOR INFANT MALTREATMENT PREVENTION

By

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ABSTRACT

Child maltreatment is a pressing public health issue in the United States, with over three million children referred to child protective services in 2021 alone. Infants are particularly vulnerable to victimization. Policy interventions that aim to support families economically, such as the earned income tax credit, housing assistance programs, subsidized childcare, and higher state minimum wages, have been shown to reduce child maltreatment. Socioeconomic disadvantage and financial instability increase family stress, which raises the risk of harsh or neglectful parenting practices and, ultimately, child maltreatment. Therefore, these policies help alleviate parental stress, improve financial stability, provide access to resources, and enable a better balance between work and family obligations. Paid family leave (PFL) is also a potentially helpful policy, as it offers economic support to families during crucial periods, such as the birth of a child. By allowing employees to take time off work while still receiving a portion of their wages, PFL eases financial strain and reduces the risk of maltreatment. This dissertation expands on this existing scholarship by examining the impact of state-level paid family leave policies on infant maltreatment, considering variations by maltreatment type and caregiver demographics.

The first study (Chapter 2), conducted as a scoping review following the PRISMA framework, explores how PFL affects families at different social-ecological levels. The review synthesizes evidence demonstrating the positive effects of PFL on child outcomes, parental outcomes, family outcomes, and labor market outcomes. The second study (Chapter 3) employs a quasi-experimental design to analyze the relationship between state-level PFL policies and rates of infant maltreatment. The findings suggest a significant association between PFL implementation and a decrease in reports of infant neglect, highlighting the role of economic stability in family well-being. However, an unexpected increase in reports of emotional abuse

reveals the complexity of child maltreatment and the necessity for comprehensive prevention strategies. The final study (Chapter 4) investigates the moderating effects of caregiver demographics on the relationship between PFL and substantiated cases of infant neglect. The results indicate a significantly lower rate of infant neglect in states with PFL policies, with significant interactions observed among PFL access for female, male, and white caregivers. These findings emphasize the protective influence of PFL on rates of infant neglect and underscore the importance of inclusive policies that meet the needs of diverse caregiver demographics. Collectively, these studies contribute to our understanding of the role of PFL policies in promoting family well-being and preventing early childhood maltreatment.

This dissertation contributes valuable insight into the relationship between state-level PFL policies and infant maltreatment. The studies conducted in this dissertation utilize rigorous study design and analysis methods to reveal nuanced findings about the protective effects of PFL on child welfare outcomes. This work contributes to the academic literature and has practical implications for policy development, social work practice, and future research. The decrease in infant neglect, along with the significant relationship between caregiver demographics and policy access, highlights the vital role of PFL in fostering safe and healthy environments for families during early childhood.

This dissertation is dedicated to the Sunflowers:
You all have been my most influential teachers on trauma, resilience, and the necessity of investing in prevention.

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CHAPTER 1: NATURE OF THE DISSERTATION

Child maltreatment is a pressing public health concern in the United States (U.S.). In 2021 alone, over three million children were referred to child protective services (CPS) agencies for suspected child maltreatment (U.S. Department of Health & Human Services [USDHHS], 2023). Increasingly, child welfare research has examined policies aimed at strengthening family economic support as potential strategies for effectively reducing child maltreatment risk factors. These policies include the earned income tax credit (Berger et al., 2017; Kovski et al., 2021), housing assistance programs (Fowler & Schoeny, 2017), subsidized childcare (Maguire-Jack et al., 2019; Yang et al., 2019; Zhai et al., 2013), and higher state minimum wages (Livingston et al., 2021; Raissian & Bullinger, 2017). Such research has found that these policies do reduce child maltreatment risk by reducing parental stress, improving financial stability, providing access to material resources, and promoting parental balance of work and family obligations. Building on this growing scholarship, this dissertation examines the impact of state-level paid family leave policies on infant maltreatment, with particular attention to how results may vary by maltreatment type and specific caregiver traits.

Statement of the Problem

Research indicates that by the time they reach 18 years old, more than one-third (37.4%) of all children in the U.S. will have experienced a CPS investigation (Kim et al., 2017). Societies' youngest children experience the highest risk. Among all age groups, children under two account for more than one-quarter (27.8%) of founded child maltreatment reports, and infants under the age of one have the highest annual rates of victimization (USDHHS, 2023). To better understand child maltreatment, it is necessary to examine the heightened risk that converges at the intersection of class, race, and gender for vulnerable families.

This risk is amplified in situations of poverty. Children living in poverty experience a significantly higher risk of child maltreatment – especially neglect – than children living in economically stable families (Berger, 2004; Pelton, 1978; Slack et al., 2004; Wolock & Horowitz, 1984). The third National Incidence Study of Child Abuse and Neglect (NIS-3) reported that children in families with annual incomes below $15,000 were 44 times more likely to experience child neglect compared to children living in families with an annual income over $30,000. The NIS-3 revealed that child neglect has a stronger association with poverty than other forms of child maltreatment (Sedlak & Broadhurst, 1996). It is essential to recognize, however, that poverty itself is not child maltreatment. In many states, the inability to provide for a child due to financial constraints does not necessarily indicate neglect (Weigensberg et al., 2021). Nevertheless, poverty does heighten the risk of maltreatment due to factors such as parental stress, insecure housing, limited resources, substance abuse, untreated mental health issues, and exposure to domestic violence (Doyle & Aizer, 2018; Courtney et al., 2004; Frame, 2001; Shdaimah, 2008). Conversely, access to economic resources and maternal labor force participation correlate with reduced involvement in child welfare services and fewer cases of children being removed from their homes (Berger, 2006; Duva & Metzger, 2010; Maguire-Jack et al., 2021).

Further examination of child maltreatment incidence underscores racial disparities. African American children face the highest risk of investigation for maltreatment, followed by Hispanic and Native American children. The fourth National Incidence Study of Child Abuse and Neglect (NIS-4; 2005-2006) was the first to uncover substantial racial disparities in child maltreatment, with higher rates observed among Black children compared to White or Hispanic children (Sedlak et al., 2010). Lifetime prevalence estimates suggest that over half (53%) of

African American children will experience a CPS investigation, while under a quarter (23%) of white children are expected to have the same fate (Kim et al., 2017). Similar racial disparities are represented in the administrative data reported by U.S. child welfare agencies. Specifically, compared to White children (7.1 per 1,000), American Indian or Alaskan Native (15.2 per 1,000), African American (13.7 per 1,000), multi-racial (10.3 per 1,000), Native Hawaiian or Pacific Islander (8.5 per 1,000), and Hispanic (7.7 per 1,000) children consistently exhibit higher rates of substantiated cases (USDHHS, 2023). Moreover, these inequities are particularly pronounced regarding infants. In 2021, American Indian or Alaskan Native infants suffered from maltreatment at a rate nearly three times higher (56.6 per 1,000) than that of White (22.1 per 1,000) same-aged infants; African American infants experienced maltreatment rates two times higher (44.3 per 1,000) than their white peers (USDHHS, 2023).

The concept of child neglect was first distinguished as a distinct type of maltreatment in the 1960s by Leontine Young, who characterized neglect "as a failure by emotionally needy mothers" (Rose & Meezan, 1993, p. 281). This early definition underlies an assumption that continues to influence child welfare and broader social structures in the United States, which is that child neglect often originates from perceived maternal shortcomings. Furthermore, women, regardless of their marital status, continue to devote more time to childcare-related activities than men (Parker & Wang, 2013). This societal expectation places a significant burden on women in their roles as primary caregivers, particularly with the increasing participation of women in the workforce in the United States. It helps maintain the phenomenon of mother-blaming or perceiving insufficient caregiving as the failure of women. Importantly, these practices disproportionately penalize already vulnerable groups such as poor mothers, single mothers, and mothers of color (Azzopardi, 2022; Roberts, 2002; Woodward, 2021).

As such, the child welfare system has historically overlooked the role of fathers in caregiving (Gordon et al., 2012; Strega et al., 2008). Administrative data on perpetrators further highlights the gendered nature of child maltreatment. In 2021, cases where mothers were the sole perpetrators of maltreatment accounted for 38%, while those solely perpetrated by fathers accounted for 23.9%.

Purpose of the Study

Against this backdrop, this study explored the impact of state-level paid family leave policies on infant maltreatment. These policies aim to support primary caregivers, both economically and interpersonally, in balancing work responsibilities with the significant demands of childcare. This research provides insights into the benefits access to paid family leave offers as a protective mechanism against infant maltreatment more broadly and infant neglect specifically.

To accomplish this goal, the dissertation is presented in a three-paper format. Each chapter will correspond to the overarching theoretical framework and goal presented in this introduction chapter, but they are intended to stand alone. As such, some components of each chapter may overlap, such as relevant literature and methods. This research was deemed exempt by the Michigan State University Institutional Review Board. The second chapter is a scoping review that explores the relationship between state-level paid family leave policy and child, parent, and household outcomes. The third and fourth chapters examine child welfare administrative data to understand the effect of state-level paid family leave policy on infant maltreatment rates. These chapters analyze results by infant maltreatment type and caregiver demographics. The final chapter synthesizes insights from the previous chapters, identifying how

the empirical data mapped onto the risk and protective model of maltreatment can guide policymaking in support of vulnerable families.

Literature Review

Economic Policies and Child Maltreatment Prevention

Economic support policies have the potential to influence the risk of child maltreatment and involvement with child welfare services in the United States. Policies that strengthen household financial security can reduce parental stress and depression while ensuring adequate resources for children (Fortson et al., 2016). A study examining U.S. states between 2010 and 2017 uncovered a slight decline in child maltreatment reports, substantiations, foster care placements, and maltreatment-related fatalities for each additional $1,000 in state spending per person living in poverty (Puls et al., 2021). Programs providing cash assistance or alternative income initiatives, like child support payments, the earned income tax credit (EITC), and childcare subsidies, may have a protective effect in reducing child maltreatment.

Changes in social welfare policies can significantly impact the economic stability of American families and the risk of child maltreatment among vulnerable families. A study conducted in Wisconsin following the 1996 welfare reform revealed that mothers who received their full child support payment were less likely to have a child subjected to a child maltreatment investigation compared to when the payments were diverted to the state as reimbursement for welfare assistance (Cancian et al., 2013). Diverting child support payments to the state for reimbursement may increase the financial strain faced by families, which is a well-known risk factor for child maltreatment (Sedlak et al., 2010).

A similar effect has been observed with state regressive taxes. Research indicates that an increase in state cigarette and sales taxes correlates with an increase in child maltreatment

referrals. More specifically, a one-dollar state cigarette tax increase predicted an additional 12 child maltreatment referrals per 1,000 children, and increased state sales taxes predicted an increase of 5.7 child maltreatment referrals per 1,000 children (McLaughlin, 2018). Since regressive taxes impose a more significant financial burden on low-income families, such tax increases may leave families with decreased disposable income. The heightened financial burden resulting from such taxes can contribute to parenting stress and behaviors that increase the risk of child maltreatment.

Conversely, greater financial resources appear to reduce the risk of child maltreatment. This relationship is exemplified by the earned income tax credit (EITC). Increased generosity in state-level EITC programs has been associated with a decline in child neglect (Berger et al., 2017; Kovski et al., 2017), physical abuse, self-reported involvement with child protective services (Berger et al., 2017), overall rates of child maltreatment, and fewer children entering foster care (Biehl & Hill, 2018). Additionally, refundable state-level EITC programs have been linked to an 11% decrease in foster care entry rates, equivalent to an average of nearly 50 fewer children per 100,000 entering foster care (Rostad et al., 2020). The EITC is designed to provide tax relief for low-to-moderate-income workers, with the amount of credit decreasing as wages increase. Lower-income workers are eligible for a more substantial credit, and families with children who fall into the low-income category often qualify for the largest credit. This tax credit enables workers earning below a specific income threshold to retain a larger portion of their wages by offsetting federal payroll and income taxes. All but six states provide a refundable EITC, allowing workers with a credit that exceeds their state income tax liability to receive a refund from the state for the surplus amount. By ensuring that families with limited financial resources not only keep most of their wages but also receive additional income in the form of a

tax refund, the EITC alleviates financial strain for economically vulnerable families, thereby reducing the risk of child maltreatment (Berger et al., 2017; Biehl & Hill, 2018; Kovski et al., 2018; Rostad et al., 2020).

Similar protective effects have been observed with the childcare subsidy program. Although this program does not directly provide cash to families, it subsidizes a portion or all the eligible family's childcare expenses. Receipt of a childcare subsidy has been significantly associated with a lower risk of physical abuse and neglect (Yang et al., 2019) and a reduced incidence of supervisory neglect (Maguire-Jack et al., 2019). Consequently, policies that allow families to retain or receive additional household income, thus mitigating financial stress, serve as protective measures against child maltreatment.

Paid Family Leave

Paid family leave is potentially one such policy. Parents involved with child welfare often require social support during times of "need and deprivation" (Fong, 2017, p. 8). However, poverty increases the risk of adversities such as substance abuse, mental illness, and family violence. These challenges contribute to social isolation, reduced support networks, and obstacles to establishing secure caregiver-infant attachment and positive parenting practices (Bassuk et al., 1998; Brown et al., 1998; Chaffin et al., 1996; Slack et al., 2011; Stith et al., 2009). Implementing economic policies alone may not be sufficient to address these risk factors.

Family leave policies allow employees to take time off to fulfill family caregiving responsibilities. Typically, these policies cover three life events: the care of 1) a newborn or newly placed adopted or foster child, 2) certain close family members with serious medical needs, and 3) the employee's own serious medical needs that interfere with job performance. The

United States is the only OECD country that does not have a federal paid family leave entitlement program. In terms of supporting pregnant workers and new parents, the United States has attempted to address this issue through the 1978 Pregnancy Discrimination Act and the 1993 Family and Medical Leave Act (FMLA). The Pregnancy Discrimination Act allowed states to establish temporary disability insurance (TDI) programs that would provide partial wage replacement to employees during pregnancy and childbirth-related absences (Chen, 2023). However, access to TDI has remained limited, as only five states (California, Hawaii, New Jersey, New York, and Rhode Island) offer TDI for pregnancy or childbirth. Thus, the majority of working American women remained without access to leave – compensated or not - for pregnancy or childbirth.

To bridge this gap, the Family and Medical Leave Act provides eligible employees with 12 weeks of job protection during unpaid leave. Notably, the impact of the Family and Medical Leave Act on child maltreatment has not been thoroughly examined. Nevertheless, infants whose mothers utilized FMLA showed more positive health outcomes, such as increased birth weight, reduced rates of premature birth and infant mortality, and a greater number of well-baby doctor visits (Rossin, 2011; Washbrook et al., 2011). Likewise, the use of TDI to care for a new child led to lower rates of low-birth-weight births, especially among unmarried and Black mothers (Stearns, 2015). Given that children with physical health issues, chronic illnesses, and special needs face a higher risk of child maltreatment, favorable birth outcomes and an increased number of well-child visits can serve as protective factors.

Only 56% of American employees meet the eligibility requirements for FMLA, with low-wage workers being the most likely group to need but not take leave for a qualifying FMLA event (Brown et al., 2020). As a result, American families collectively lose approximately $20.6

billion in earnings due to the lack of access to paid family and medical leave (Glynn & Corley, 2016). California was the first state to implement a paid family leave policy in 2004, inspiring the implementation of similar programs in seven other states and the District of Columbia. Furthermore, four additional states have passed paid family leave legislation set to take effect by 2026. These state-level initiatives present an opportunity to examine the benefits of paid family leave and its potential to mitigate the risk of child maltreatment within families.

Theoretical Framework

Family Stress Model

Children from low socioeconomic status (SES) backgrounds experience a higher risk of child maltreatment compared to their peers from higher SES families. Specifically, children from low SES families are more than three times as likely to experience abuse and over seven times as likely to experience neglect (Sedlak et al., 2010). Material hardship is a predictor of child welfare involvement and neglectful parenting behaviors (Slack & Berger, 2021). It is important to note that not all impoverished families engage in child maltreatment. Still, there is a disproportionate representation of low-income families in cases of child maltreatment, particularly neglect (Child Welfare Information Gateway, 2023). The family stress model aims to elucidate the reasons behind this overrepresentation and the connection between financial strain and the risk of child maltreatment. According to this model, socioeconomic disadvantages, such as low income, job loss, or adverse financial events, place considerable pressure on families (Conger et al., 2000). These economic conditions can result in material hardship and difficulties in meeting basic needs, leading to parental distress and conflict. Consequently, parents may engage in harsh or neglectful parenting practices (Conger & Conger, 2002), which are recognized risk factors for child maltreatment (Akehurst, 2015; Schumacher et al., 2001; Stith et al., 2009).

The family stress model has been applied successfully to various types of families, including African American, European-American, and Mexican American families, as well as two-parent and single-parent families, and urban and rural environments (Conger et al., 2002; Gutman et al., 2005; Jacson & McLoyd, 2015; Parke et al., 2004). However, it should be noted that stress alone cannot fully explain the link between poverty and child maltreatment. While several studies account for mothers' demographic and economic characteristics (Newland et al., 2013; Warren & Font, 2015), they may overlook certain gender-related aspects of family stress and financial pressure. Factors such as female labor force participation, gender roles and expectations, familial power dynamics, and family-friendly policies may also influence economic hardship and parental distress, particularly in female-headed households.

Attachment Theory

Attachment theory is a developmental theory that emphasizes the importance of the relationship within the mother-infant dyad. Infants are naturally inclined to seek proximity to their mothers, and the quality of their attachment depends on the mothers' responsiveness (Bowlby, 1969). Secure attachments are formed when mothers consistently respond to their infants' needs. However, insecure attachments may develop if mothers are unresponsive or insufficiently responsive (Ainsworth, 1979). These attachment patterns provide insight into maternal caregiving behaviors. Insecurely attached infants often have mothers who exhibit insensitivity, unavailability, unresponsiveness, or inappropriate responses to their needs. Consequently, children develop an internal working model of attachment (Bowlby, 1969) that shapes their behavior, emotional regulation, interpersonal skills, and expectations in relationships. This generational impact can influence how individuals respond to the proximity needs of their children.

While it is believed that insecure attachments are a result of child maltreatment, research testing this claim is limited (Baer & Martinez, 2006). Data shows that maltreated children are, indeed, more likely to experience insecure and disorganized attachment styles compared to their counterparts. However, researchers recognize that many factors may affect this outcome: for example, "severe poverty affects parenting practices, as does the number of children in the family" (Baer & Martinez, 2006, p. 194). Challenges such as persistent poverty, intergenerational transmission of poverty, depression, substance abuse, and social factors can hinder the establishment of secure attachment, resulting in what Wilson and Horner (2005) refer to as affective starvation in infants. As such, parents facing personal or socioeconomic adversities may struggle to meet their infants' basic emotional and physical needs, which are often indicators of neglect. Therefore, it is crucial to consider these additional factors that impede parents' ability to foster a secure attachment. These factors have not received sufficient attention within the existing conceptualization of attachment theory. Thus, the family stress model complements attachment theory by providing a more comprehensive understanding of the various factors that contribute to parenting stress, attachment development, and the overall risk of child maltreatment.

While understanding attachment theory in the context of maternal responsiveness is valuable, its implications extend beyond the parent-child relationship. This theory has influenced policies and practices in early childhood, education, and social work (Smith et al., 2017). Furthermore, it has shaped societal perceptions of gender roles, sometimes advocating for women to prioritize staying at home. Though attachment theorists contest that the attachment relationship can be applied to any primary caregiver, regardless of gender, most research grounded in attachment theory focuses on mothers as the primary caregivers. Attachment theory

has faced criticism from feminist scholars for promoting a gendered view of parenting that aligns with heteronormative and patriarchal systems; "a theory and research programme animated by a conservative wish to responsibilize women and police their childrearing" (Duschinsky et al., 2015, p. 179). This gendered lens may have facilitated one of the first definitions of child neglect to be understood as "a failure by emotionally needy mothers" (Rose & Meezan, 1993, p. 281). Therefore, while a limitation of attachment theory is its "failure to recognize the profound influences of social class, gender, ethnicity, and culture on personality development" (Kagan, 2011, p. 5), it is possible that attachment theory can simultaneously influence societal expectations – including the parental expectations espoused by the child welfare system. Rather than using attachment theory to limit women's capacities, it can catalyze advocating for family-centered policies supporting women's workforce participation.

Conceptual Framework for the Current Study

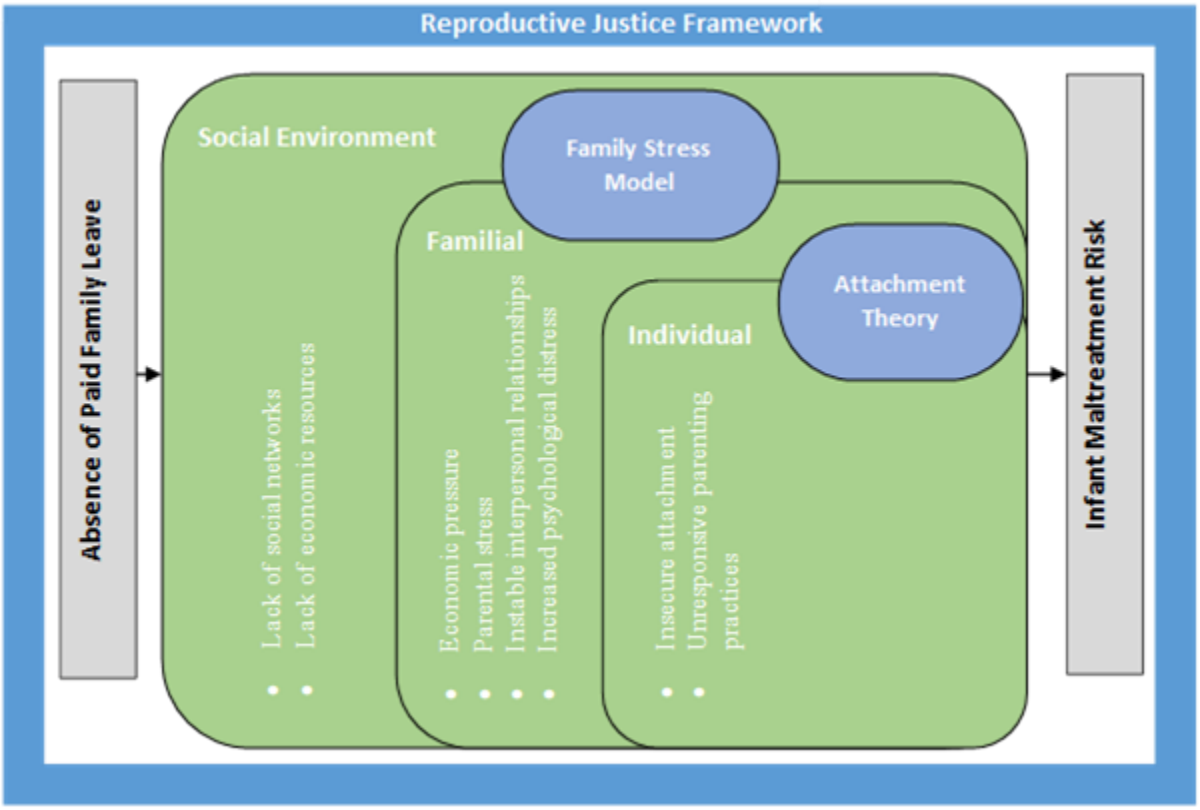
Nearly five decades ago, Garbarino (1977) proposed a departure from the medical approach to child abuse and advocated for an ecological framework of interactive nested social systems. These systems include political, economic, and demographic factors that influence the quality of family life. This paradigm shift recognizes that child maltreatment exists within a continuum of bidirectional caregiver-child relationships (Freisthler et al., 2006). Gaining a deeper understanding of these relationships reveals various risk and protective factors associated with child maltreatment, emphasizing the need for interventions that address family circumstances (Feely et al., 2020). Garbarino's model builds upon Bronfenbrenner's (1977) ecological systems framework, providing a conceptual foundation for understanding the relationships between contextual factors that contribute to compromised care and how opportunities for early caregiver-infant attachment, along with the alleviation of economic

pressure, can mitigate the risk of infant maltreatment. The conceptual framework for this dissertation, illustrated in Figure 1.1, integrates the family stress model and attachment theory within the socioecological model, emphasizing how state-level paid family leave interacts with various risk factors for child maltreatment. Attachment theory explains how paid family leave may promote secure attachment through responsive parenting practices and reduced parental stress. Concurrently, the family stress model explains how paid family leave policies may mitigate increased financial pressure, promoting stable relationships, social support networks, and access to financial resources.

This study incorporates the reproductive justice framework (Ross & Solinger, 2017) to highlight the significance of race, class, and gender. Black feminist scholars have long provided a theoretical framing for understanding various interlocking forms of oppression. Reproductive justice is one such framework that can aid in analyzing the connection between child maltreatment, race, class and gender. Reproductive justice was coined by women of color, focusing on addressing racism, classism, and other systemic oppressive forces within the white-dominated fight for reproductive rights (Luna & Luker, 2013; Ross, 2006). Reproductive justice centers around three core rights: 1) the right to not have a child, 2) the right to have a child, and 3) the right to parent children in safe and healthy environments. It seeks to establish a framework that promotes racial, gender, economic, and environmental justice, asserting that individuals must have access to resources that create a safe and healthy environment such as high-quality health care, housing, education, employment, as well as a robust and effective social safety net (Ross & Solinger, 2017). By incorporating reproductive justice into the dissertation's framework, the unique experiences of child welfare-involved families, particularly low-income mothers of color, are emphasized.

Figure 1.1

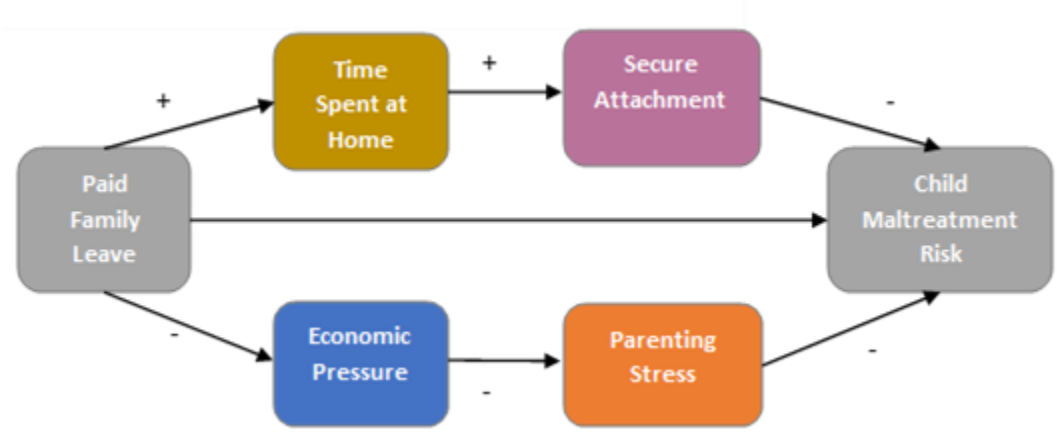
Conceptual framework for the current study



There is a tension between the family stress model and attachment theory within American social welfare policy. While the family stress model acknowledges the potential for reduced parental stress when parents work outside the home, it fails to consider attachment as a protective mechanism. Similarly, attachment theory does not account for how time away from children can promote overall family well-being. Figure 1.2 illustrates how access to paid family leave may prevent infant maltreatment. It does so by granting parents more time at home to foster secure attachment while reducing financial pressure despite the time spent away from work. Thus, paid family leave emerges as a promising strategy for enhancing parental-infant attachment and alleviating increased family financial pressure that may contribute to infant maltreatment.

Figure 1.2

Pathways of decreased child maltreatment risk



Integrating the Literature

Growing research indicates that policies providing extraneous income (e.g., child support payments, the EITC, subsidized childcare) are more protective against child maltreatment than policies that reduce disposable income (i.e., regressive taxes: McLaughlin, 2018) or those involving in-kind transfers (i.e., food stamps; Lee & Mackey Bilaver, 2007). Groundbreaking research conducted by Child Trends revealed that from 1993 to 2019, the U.S. social safety net, particularly EITC and child care subsidies, reduced child poverty by 44%, impacting 6.5 million children (Thomson et al., 2022). This finding is essential in safeguarding vulnerable families, yet still, over 11.6 million American children continue to live in poverty. Almost half of these children (47.5%) live in extreme poverty, and over half of poor children (58.4%) live in families headed by single mothers, with a higher proportion of those families living in poverty (32.1%) compared to families with children headed by unmarried fathers (14.3%) or married couples (5.9%) (Javaid & Tucker, 2021). Families headed by single women of color experience even worse economic outcomes. Black women face the highest likelihood of single motherhood than any other racial group (Elliott et al., 2015). Specifically, in 2002, 25% of Black women between

the ages of 22 and 44 were single mothers compared to 9% of White women of the same age (Thistle, 2006). During the Great Recession in 2008, these figures rose to 50.4% and 18.5%, respectively (Kreider & Ellis, 2011). Black women juggle single parenthood and employment nearly three times more than White women (Thistle, 2006), and families headed by Black women are more likely to remain in poverty. More than one in three Black (35.6%) and Latinx (36.9%) single mother-headed households live in poverty compared to one in four White (27.6%) single mother-headed households (Javaid & Lowell, 2021). The Child Trends study asserts that economic factors such as decreasing unemployment rates, increases in single mothers' labor force participation, and increases in state-level minimum wages contributed to 33% of the decline in child poverty. As such, the team's recommendations to further reduce child poverty not only focused on increasing the strength of and access to the U.S. social safety net but notably also on policies that support stable parental employment and more robust female labor force participation (Thomson et al., 2022).

Despite the reality of working motherhood in America and the intersecting influence of class, race, and gender on this experience, the effects of family-friendly workplace policies on child maltreatment remain understudied. One notable exception to this rule is a study conducted by researchers from the Centers for Disease Control and Prevention. Using hospital admissions data, Klevens and colleagues (2016) found that state-level paid family leave in California predicted a decrease of 5.8 hospital admissions for pediatric abusive head trauma per 100,000 children under one year of age. This groundbreaking study is pivotal in understanding the utility of paid family leave as a child maltreatment prevention mechanism. Pediatric abusive head trauma is a particularly severe form of physical abuse that most often occurs when the perpetrator is a male caregiver (Joyce et al., 2023). Therefore, additional research is needed to

investigate the impact of paid family leave policies on other forms of child maltreatment to understand whether this protective effect remains across diverse family contexts. These gaps in the literature underscore the need for further investigation into the relationship between state-level paid family leave policies and infant maltreatment. This dissertation aims to contribute to existing scholarly research by addressing these limitations.

The complexity of policy analysis remains due to the inability to conduct true population-level experiments. A thorough understanding of the contextual factors that may influence study outcomes can enhance the rigor of policy analysis. Consequently, a comprehensive synthesis of the existing literature is imperative in determining how paid family leave policies relate to the established risk and protective factors associated with child maltreatment. Chapter 2 evaluates the literature by establishing a connection between state-level paid family leave policies and child, parent, and household outcomes that protect families from the risk of maltreatment. A scoping review addressed the research question: *What is known about child, parental, and household outcomes associated with state-level paid family leave in the United States?* Scoping reviews can be used to explore emerging research ideas (Tricco et al., 2016). Data collection was informed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist and guidelines (Moher et al., 2009), and pertinent studies were identified. Ultimately, 38 articles were included and organized using thematic analysis (Braun & Clarke, 2006). The articles were generally organized into four themes: child outcomes, parental outcomes, family outcomes, and labor force outcomes. Each general theme consisted of several sub-themes. Child outcomes include birth outcomes, infant vaccination rates, hospitalization rates, cognitive development, and parent-reported child health. Parental outcomes included parental health, fertility rates and timing, breastfeeding practices, maternal mental health, and

paternal mental health. Family outcomes included family financial security and parent-child engagement. Lastly, labor force outcomes included leave-taking behaviors, wage earnings, labor force attachment, and lived experience with paid leave. The themes and sub-themes largely align with the socioecological model of child maltreatment prevention. However, the results indicate that little research has explicitly linked paid family leave to child maltreatment outcomes. Through this analysis, I was able to map the themes and sub-themes onto known child maltreatment risk factors to begin to bridge the knowledge gap regarding the potential benefits of state-level paid family leave policies for American families.

Chapters 3 and 4 use secondary data analysis to investigate the association between existing state-level paid family leave policies and instances of infant maltreatment. Both chapters draw on data from the restricted Child File from the National Child Abuse and Neglect Data System (NCANDS) and other publicly available data sources. Chapter 3 explored the research question: *What is the relationship between different types of infant maltreatment (i.e., physical abuse, neglect, sexual abuse, emotional abuse) and the presence of state-level paid family leave policy?* Data on instances of infant maltreatment from 2005 to 2019 are collected from NCANDS for all states. The treatment states (i.e., those with paid family leave policies) include New Jersey, Rhode Island, and New York. The dependent variable is the annual rates of infant maltreatment, categorized by type of maltreatment. The independent variable is a binary variable indicating the implementation of a paid family leave policy at the state level. Control variables at the state level include the family poverty rate, proportion of adults between 25 and 64 without a high school diploma, labor force non-participation rate, and single-parent rate. The treatment effect of state-level paid family leave policy was estimated using a difference-in-difference analysis. Group results reveal that the presence of paid family leave predicted a decrease in 4.60

per 1,000 cases of infant neglect compared to states without paid family leave policies. Cohort results indicate that the implementation of Rhode Island's paid family leave program predicted a decrease of 17.07 per 1,000 cases of infant neglect compared to states without paid family leave policies. Paid family leave policies appeared to predict an increase in emotional neglect. There was no significant effect on physical sexual abuse.

In Chapter 4, the study answers the question: *To what extent do caregiver race and gender influence the incidence of infant neglect in states with a paid family leave policy compared to states without a paid family leave policy?* To address this inquiry, a panel dataset from the NCANDS-restricted Child File covers the period between 2003 and 2019. The dependent variable focuses on substantiated cases of infant neglect, while the independent variable remains a binary indicator of whether a state has implemented a paid family leave policy. The moderating variables considered in the analysis are caregiver race and gender. The study employs multivariate imputation and generalized linear mixed modeling to evaluate whether caregiver race and gender moderate the impact of state-level paid family leave policy on infant neglect rates. The results indicated that states with paid family leave had significantly lower substantiated infant neglect rates. In addition to state access to paid family leave, the analysis examined the influence of various state-level covariates on infant neglect. It revealed an inverse relationship between both family poverty and adults with less than a high school degree and infant neglect. States with higher rates of labor force non-participation had higher rates of infant neglect while single parenthood did not have a significant relationship with infant neglect. This analysis revealed significant interactions, indicating that higher proportions of perpetrators who were female and white caregivers and lower proportions of perpetrators who were male

caregivers were associated with lower rates of infant neglect. No significant interaction was found for non-white caregivers.

Chapter 5 presents a comprehensive discussion of the entire dissertation. Although each study can be understood independently, they are interconnected and contribute to an iterative analysis. This dissertation provides valuable insights into the effects of state-level paid family leave policies on family well-being and child maltreatment prevention. This chapter synthesizes the findings from each study and integrates the significance of these findings into the broader research landscape. The research importantly contributes to the existing academic literature and has significant implications for policy development, social work practice, and future research. As a result, this final chapter offers a discussion of these implications and suggestions for directions for future research related to this work.

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CHAPTER 2: UNDERSTANDING PAID FAMILY LEAVE AND FAMILY-RELATED OUTCOMES: A SCOPING REVIEW

Abstract

Research on paid family leave (PFL) suggests that taking paid time off work can positively impact maternal and child health and broader household outcomes. This study follows the PRISMA framework for scoping reviews to explore how state-level PFL in the U.S. can affect families at different levels of the socioecological model for child maltreatment. The study conducted a thorough literature search from October 2022 to January 2023, resulting in 5,600 unique studies. These studies were then independently screened for eligibility, with 38 studies meeting the criteria for final data extraction. The reviewed literature revealed four themes: child outcomes, parent outcomes, family outcomes, and labor market outcomes. These themes were then mapped onto the socioecological model of child maltreatment prevention. The findings highlight the positive effects of PFL on child outcomes, such as increased vaccination rates, decreased hospital admissions, and improved cognitive functioning. Paid family leave also plays a role in reducing prenatal and perinatal mortality, low birth weight, and premature births, all of which are associated with higher risks of health complications and subsequent maltreatment. The study also suggests a potential link between PFL and strategic birth spacing, which can help mitigate maltreatment risks. Additionally, PFL policies promote breastfeeding practices and reduce parental stress, positively impacting parental mental health and household dynamics. However, the review acknowledges disparities in the distribution of PFL benefits, with privileged groups experiencing greater advantages compared to disadvantaged families. Addressing these disparities is crucial for optimizing the preventive potential of PFL in mitigating child maltreatment and fostering comprehensive family support systems. This review

synthesizes the multifaceted impacts of PFL policies and their effects on child, parent, and household outcomes, increasing our understanding of effectively utilizing these policies as a primary prevention tool for early childhood maltreatment.

Introduction

Socioeconomic disadvantage and financial instability can increase stress levels within a family, leading to conflict and potentially harsh or neglectful parenting practices (Conger & Conger, 2002). These factors also increase the risk of child maltreatment. However, research suggests that policies like paid family leave can help mitigate this risk by providing economic support to families (Fortson et al., 2016). Paid family leave allows employees to take time off from work to care for a new child, sick family member, or their own health recovery while still receiving a portion of their wages (Fortson et al., 2016).

Despite efforts to support pregnant employees and new parents through federal policies, such as the Pregnancy Discrimination Act of 1978 and the Family and Medical Leave Act of 1993, the U.S. remains the only OECD country without a federal entitlement for paid family leave (PFL). The need for these laws arose in the 1960s and 1970s as more women entered the workforce, leading to legal disputes regarding pregnancy and the workplace. Key Supreme Court cases debated the constitutional aspects of employment practices related to discrimination against pregnant individuals and the inclusion of pregnancy as a medical condition under disability insurance (Trzcinski & Alpert, 1994). Although the Supreme Court initially failed to fully recognize the denial of temporary disability insurance benefits for pregnancy-related work loss as a violation of the 14th Amendment's Equal Protection Clause, the dissenting opinion in General Electric v. Gilbert in 1976 laid the foundation for the passing of the federal Pregnancy Discrimination Act in 1978. While this amendment to the 1964 Civil Rights Act prohibited

discrimination based on pregnancy, childbirth, or related medical conditions (United States Department of Labor, n.d.), numerous employed women in the U.S. still lacked access to any form of leave – paid or unpaid – for pregnancy-related absences, highlighting the struggle for comprehensive paid family leave in the country.

In the 1980s, efforts were made at the legislative level to address the need for a federal family leave bill. The Family Employment Security Act (FESA) of 1984 proposed 26 weeks per year of unpaid leave with job security for various circumstances, including caring for a newborn, a child's illness, a spouse's disability, or an employee's disability (Sholar, 2016). Although FESA did not progress in Congress, it laid the groundwork for subsequent bills, including the Family and Medical Leave Act (FMLA). The FMLA gained bipartisan support in Congress in the 1990s but was vetoed twice by President H. W. Bush before being signed into law by President Clinton in 1993. This act granted 12 weeks of unpaid, job-protected leave for employees of private entities with at least 50 employees who have worked a minimum of 1,250 work hours in the previous 12 months (National Conference of State Legislatures, 2022).

However, due to significant gaps in coverage left by the Family and Medical Leave Act, individual states have taken additional measures by implementing their own paid family leave programs. Through a scoping review format, this research aims to review existing studies on state-level paid family leave programs and their impact on outcomes related to children, parents, and households. By gaining a deeper understanding of how paid family leave contributes to family well-being, we can effectively assess its potential as an intervention to reduce the risk of child maltreatment.

Literature Review

To understand the landscape of paid family leave, it is important to examine existing research at both national and international levels. In the United States, the Family and Medical Leave Act (FMLA) has provided valuable insights into the impact of unpaid leave on maternal and child health outcomes. However, it has also brought attention to disparities in access and outcomes among low-wage earners. Studies have emphasized the potential benefits of more generous paid family leave policies internationally. These studies offer valuable lessons that could inform an understanding of the current policy context in the U.S.

Family and Medical Leave Act Outcomes

Two primary studies have provided insights into maternal and child health outcomes related to unpaid leave facilitated by FMLA. Rossin (2011) demonstrated improved infant health outcomes for children whose mothers were most likely to use unpaid FMLA leave. Improved health was measured by higher birth weight and low premature birth and infant mortality rates. Conversely, Washbrook and colleagues (2011) failed to demonstrate any change in breastfeeding duration or rates of maternal depression due to FMLA. However, this second study found a possible increased frequency of well-baby doctor visits for children of mothers who utilized FMLA (Washbrook et al., 2011).

For states where temporary disability insurance (TDI) covers pregnancy and childbirth, pregnant workers often use TDI with FMLA. Stearns (2015) analyzed the infant health effects of TDI in the five states noted above (i.e., California, Hawaii, New Jersey, New York, and Rhode Island). The availability of TDI leave for the care of a new child reduced the share of low-birthweight births, with the most substantial effects found for unmarried and Black mothers (Stearns, 2015).

Furthermore, the U.S. Department of Labor conducted employer and employee surveys in 1995, 2000, 2012, and 2018 to better understand Americans' utilization of and experiences with FMLA. According to the 2018 FMLA surveys, 56% of surveyed employees were eligible for FMLA (Brown et al., 2020). The surveys revealed that low-wage employees were more likely to report needing but not taking leave for a qualifying FMLA event, a phenomenon known as an *unmet need*. More specifically, seven percent of surveyed employees reported an unmet need for leave, a two percent increase from the 2012 surveys. The most common reason cited for employees not taking needed leave was the inability to afford unpaid leave (66%) (Brown et al., 2020). An analysis from the Center for American Progress suggests that working American families lose approximately $20.6 billion in lost wages due to a lack of access to paid family and medical leave (Glynn & Corley, 2016). However, there is ample international evidence demonstrating that the value of a federal paid leave program extends far beyond material wages.

International Paid Family Leave Outcomes

International research consistently indicates that countries with more generous paid family leave policies tend to have lower infant and child mortality, particularly during the post-neonatal and early childhood periods (Ahmed & Fielding, 2019; Khan, 2020; Ruhm, 2000; Shim, 2013; Tanaka, 2005). Additionally, these policies have been associated with other benefits, such as a decrease in low-birthweight births (Tanaka, 2005), a reduction in maternal depression (Avendano et al., 2015), and an increase in maternal employment and fertility rates (Ahmed & Fielding, 2019). The literature also highlights the economic advantages of paid family leave. Studies have shown that such a policy can increase maternal employment and fertility rates, positively impacting economic stability and well-being (Ahmed & Fielding, 2019). However, the

specific factors driving these outcomes may vary. For example, longer leave durations appear to be associated with reduced infant mortality and maternal employment, while higher maternity leave payments are linked to increased fertility (Ahmed & Fielding, 2019).

It is important to consider that social, cultural, and economic contexts influence the effects of paid family leave policies. The studies mentioned earlier were conducted in various international contexts, including Europe, Asia, and Africa. Variations in healthcare systems, social welfare, and cultural and societal norms can impact the specific outcomes observed in each study. While these studies provide valuable insights into paid family leave programs in their respective regions, cross-national comparisons are limited due to differences in policy designs. Furthermore, the findings cannot be directly applied to the United States due to disparities in the duration and generosity of leave programs compared to the few existing programs in the U.S. and the lack of more comprehensive social insurance and safety net programs in the U.S. Therefore, this scoping review aims to analyze the current literature on paid family leave policies at the state level in the U.S. The subsequent section will provide an overview of the status of these programs in the U.S. and the specific states where they have been implemented.

Paid Family Leave in the U.S.

California (CA) became a pioneer for paid family leave in the United States when it passed the first state-level paid family leave policy in 2002. Implemented in 2004, the original program extended partial wage replacement (55%) for eligible workers, with a maximum weekly cap of $603 for six weeks. Currently, CA offers eight weeks of family leave with 60-70% wage replacement and a maximum weekly benefit amount of $1,620. Unlike the FMLA, CA's paid family leave does not impose restrictions based on the size of employers, rendering most private sector employees in CA eligible for paid leave benefits. The 2004 Paid Family Leave Act, when

combined with CA's Temporary Disability Insurance (TDI) program, facilitated the potential for workers to have up to 16 weeks of partially compensated leave during pregnancy and childbirth: four weeks preceding birth (TDI) + six weeks following birth (TDI) + six weeks within the first year after birth (PFL). Although this iteration of paid family leave falls significantly short compared to other OECD nations, research on this effort has provided compelling evidence for the necessity and benefits of a federal paid leave entitlement in the United States, much of which will be detailed in this study.

Besides California, eight other states and the District of Columbia have implemented paid family leave programs. Three additional states have passed state-level paid family leave legislation, which will all take effect by 2026. There is a significant variation in the design, generosity, and implementation of paid family leave programs across the United States. Most states offer a maximum of 12 weeks for parental leave. Apart from California, Rhode Island is the only state that falls below this threshold, offering six weeks of family leave. All states except California, DC, and Washington provide job protection beyond the provisions of the Family and Medical Leave Act. The percentage of wage replacement and the maximum weekly dollar amount vary significantly among states. California offers the highest maximum wage replacement, while other programs range from $840 (Connecticut) to $1,427 (Washington). Refer to Appendix A for an overview of state-level paid family and medical leave programs in the United States.

Economic Policies and Child Maltreatment Prevention

A growing body of literature examines the impact of different economic support policies in the U.S. on child maltreatment and child welfare involvement. Such policies aimed at improving household financial security have the potential to reduce instances of child

maltreatment by alleviating parental stress and depression, ensuring sufficient resources for children's basic needs, and increasing access to childcare (Fortson et al., 2016).

A recent study analyzing U.S. states from 2010 to 2017 found a correlation between increased state spending per person living in poverty on benefit programs and a slight decrease in child maltreatment reports, substantiations, foster care placements, and child maltreatment-related fatalities (Puls et al., 2021). Further research has identified cash assistance programs, such as child support payments, the earned income tax credit (EITC), and child care subsidies, as potential protective measures against child maltreatment. For instance, a randomized control trial in Wisconsin demonstrated that receiving full child support payments was associated with a lower likelihood of a child becoming the subject of a maltreatment investigation (Cancian et al., 2013).

Other studies have found that increased generosity of state-level EITC programs was associated with lower rates of child neglect (Berger et al., 2017; Kovski et al., 2021), physical abuse, child protective services involvement (Berger et al., 2017), and foster care entry rates (Biehl & Hill, 2018). Refundable state-level EITC programs were also linked to decreased foster care entry rates (Rostad et al., 2020). Receiving subsidized childcare was also associated with a reduced risk of physical abuse and neglect (Yang et al., 2019) and a lower rate of supervisory neglect (Maguire-Jack et al., 2019).

These findings collectively suggest that policies providing additional household income or improving financial stability can help mitigate instances of child maltreatment. Conversely, it can be speculated that removing extra household income would have the opposite effect. Interestingly, McLaughlin (2018) focused on the impact of regressive taxes on child maltreatment rates and found that higher taxes that impose a more significant financial burden on

low-income families potentially lead to higher rates of child maltreatment referrals. For example, a one-dollar increase in state cigarette tax was associated with 12 additional child maltreatment referrals per 1,000 children (McLaughlin, 2018).

While the increase in income from the EITC may shield families from financial instability, reduced disposable income resulting from higher regressive taxes may contribute to elevated financial stress and, consequently, to higher rates of child maltreatment referrals.

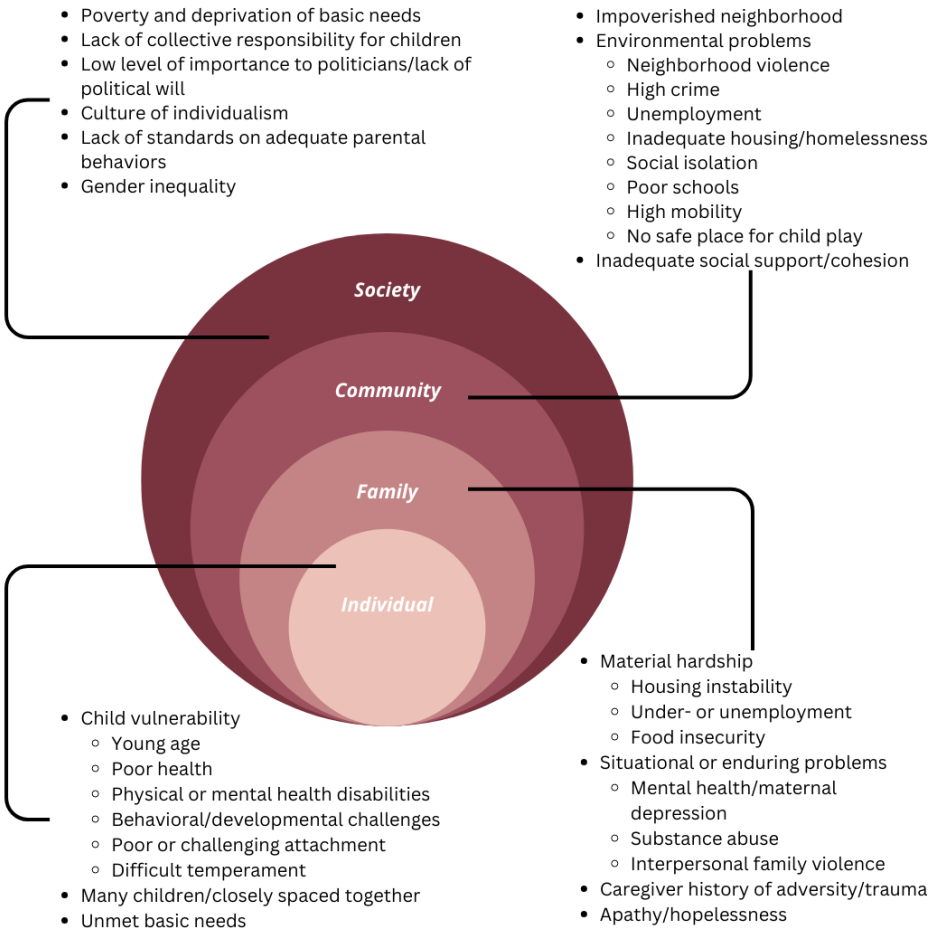
Material support provided to families through in-kind public assistance programs is also relevant to this discussion. According to Lee and Mackey Bilaver (2007), participation in both the Food Stamps Program and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) significantly reduces substantiated reports of child abuse and neglect (Lee & Mackey Bilaver, 2007). Interestingly, individuals enrolled in WIC alone demonstrated lower rates of child maltreatment compared to those in only the food stamps program. Since the WIC program provides case management in addition to material resources to families with children under five years old who are at a higher risk for maltreatment, targeted interventions that focus on bonding, parental stress reduction, resource referrals, as well as material support could protect this vulnerable group.

The current framework for preventing child maltreatment primarily relies on social cognitive theory and interventions that target parental behavior change. However, addressing the underlying systemic issues contributing to child maltreatment requires a more comprehensive understanding. The socioecological model of child maltreatment prevention offers an alternative theory that explains how interconnected factors and environmental influences within a family system can impact overall family well-being. By expanding the theoretical framework to include the individual, family, community, and societal levels, we can better understand the specific risk

factors for child maltreatment and develop effective protective measures. This review utilizes the socioecological model to explore the potential impact of state-level paid family leave on U.S. families at different levels of the social environment, ranging from the individual and family levels to the broader community and societal levels. Figure 2.1 illustrates the known risk factors for child maltreatment mapped onto the four levels of the socioecological model (Austin et al., 2020). These factors informed this study's inclusion and exclusion criteria, which are discussed in more detail in the methods section. Insights from this review will inform future research directions.

Figure 2.1

Socioecological model of child maltreatment risk factors



Current Study

Paid family leave research suggests that paid time away from work may positively affect child and maternal health and broader household outcomes. While there is a growing body of research examining the impact of specific economic support policies (e.g., the child tax credit, the earned income tax credit, and child care subsidies) on child maltreatment outcomes, the direct connection between paid family leave and child maltreatment has yet to be fully explored in the literature. Using the socioecological model of child maltreatment, risk and protective factors can be conceptualized at the individual, family, community, and societal levels to understand better the utility of paid family leave in promoting family well-being. This scoping review addresses the following research question: *1) What is known about child, parental, and household outcomes associated with state-level paid family leave in the U.S.?*

Methods

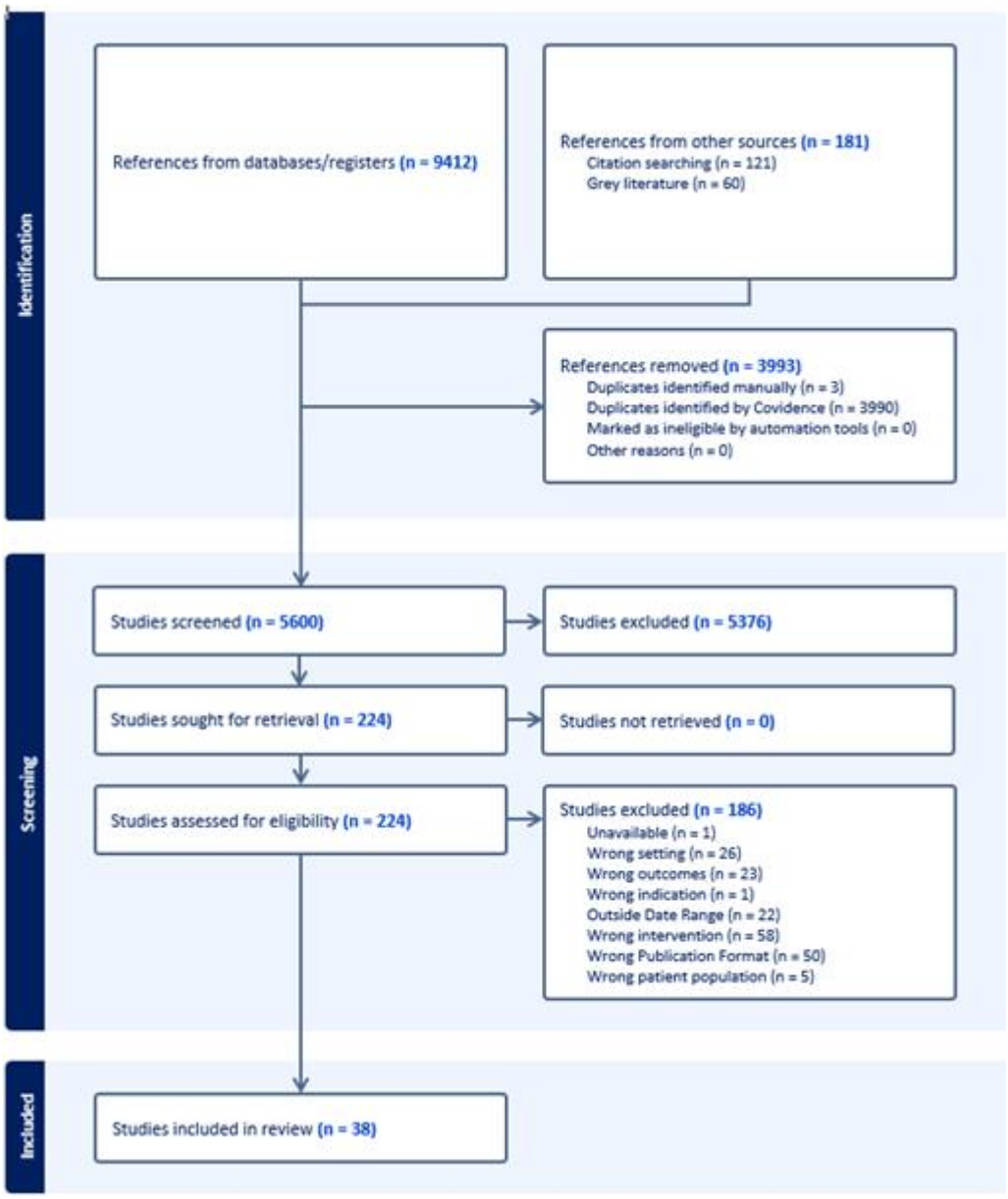
Data Collection and Analysis

Identifying Relevant Studies

The process and reporting of this review were guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extension for scoping reviews (Tricco et al., 2018). The PRISMA flowchart in Figure 2.2 summarizes the study identification and selection process. The systematic review software *Covidence* was used to facilitate the search organization, study selection, data extraction, and data charting processes.

Figure 2.2

PRISMA flowchart



A two-stage data collection process was conducted to identify articles relevant to the research question. This two-stage process included (1) a comprehensive search of electronic databases identified as most relevant to the literature and (2) identification of non-peer-reviewed

published studies (i.e., gray literature) via methods such as citation chaining and hand-searching.

For the first stage of data collection, four electronic databases were selected: *PsycInfo, including PsycArticles, PubMed (Medline), Sociological Abstracts*, and *EconLit.* These databases were selected in consultation with a staff librarian to provide a comprehensive search result spanning multiple disciplines. Several search parameters were implemented to refine the search and produce results most relevant to this study's research questions. The publication date was limited to after 1994, when the Family and Medical Leave Act was implemented, providing the first federal policy for protected time away from work to care for a new child. Additional search parameters include language (English only) and document type (peer-reviewed journal). An initial search was conducted on October 4, 2022, and a repeat search was conducted on October 18, 2022, after adding *Social Service Abstracts* as a relevant and necessary database. Search terms were consistent across databases. This first round of electronic database searching identified 1,158 articles, of which 105 duplicates were removed. Searches were an iterative process, as recommended by Levac and colleagues (2010), and additional search terms were added to the search strategy when the initial search failed to identify critical articles known to me. As such, to identify articles that examined the impact of paid family leave on maternal and child health outcomes, the following search terms were added to the search strategy for all five databases: (child* OR infant OR toddler OR mat* OR maternal OR mom* OR mother) AND (health*). A database search was repeated, including the additional search terms in October 2022 and January 2023. The final search results were exported into *Covidence.* This expanded search identified 9,597 articles. The search strategy can be viewed in Table 2.1.

Table 2.1

Overview of the electronic database search strategy

Search String	("family leave" OR "paternity leave" OR "maternity leave" OR "mat leave" OR "parental leave" OR "prenatal leave" OR "adoption leave" OR FMLA OR "family medical leave act" OR "paid leave" OR "paid family leave" OR "family medical leave") AND (child* OR infant OR toddler OR mat*) AND (maltreat* OR abuse OR neglect) AND (health*)
Fields	Title; abstract; keywords
Databases	PsycInfo including PsycArticles; PubMed(Medline); Sociological Abstracts; EconLit; Social Services Abstracts
Publication Types	Journal articles, conference papers, preprints
Date Range	January 1994 to January 2023
Additional Literature	Forward and backward search on included literature

With state-level paid family leave research being a relatively new field, the studies conducted by policy think tanks, state research offices, and other non-peer-reviewed sources are critical to this study. Therefore, the second data collection stage focused on identifying relevant studies in the gray literature. Two search strategies were employed to complete this round of data collection: citation chaining and hand-searching. Citation chaining consists of scanning the reference lists of relevant articles, such as those identified through the database search. Hand-searching is manually searching relevant journals or websites for additional relevant studies. Through citation chaining and hand-searching, 181 articles were imported into *Covidence*.

Select Studies

9,593 articles were imported into *Covidence* through electronic database searches, citation chaining, and hand-searching methods. Automated *Covidence* software removed 3,993 duplicate articles, resulting in 5,600 articles for the study selection process. The study selection process occurred in two stages: 1) title and abstract screening and 2) full-text review. This process was guided by inclusion and exclusion criteria; criteria were devised post hoc based on the reviewer's increasing familiarity with the literature (Arksey & O'Malley, 2005), and the inclusion and exclusion criteria are rooted in the research question. Eligibility criteria can

typically be grouped into four categories: participants, concept, context, and source type (Peters et al., 2020). An explanation of these categories and how they guided the study's eligibility criteria are detailed in Table 2.2.

Table 2.2

Participant, concept, context, and source type criteria

Participants: Relevant study participants or population characteristics should be detailed.	• Studies that focused on state-level population data were included.
Concept: The scoping review's principal focus or central concept should be detailed.	• Research studies of any design that examined the impact of state-level paid family leave on outcomes that fit within the risk and protective factors framework (see Table 1) for child maltreatment prevention. • Any study focused on employer-related outcomes or state-level labor market trends was excluded. • All studies focused on employer-provided paid family leave policies, city-level paid family leave policies (e.g., the city of San Francisco), unpaid family leave policies, or nationwide family leave policies based outside the U.S. were excluded from this study.
Context: Guided by the research question, considerations like geographical location and specific social, cultural, race, or sex-based factors should be detailed.	• Studies related to maternal, paternal, or child outcomes are included. • All research articles in languages other than English were excluded. • Studies that took place outside of the U.S. were also excluded.
Source Type: The specific type of publication format, research design, publication availability, and unpublished or gray literature should be detailed.	• Only peer-reviewed articles with empirical data were included. • Opinion articles, magazine and news articles, systematic and other literature reviews, theses, and dissertations were excluded. • Scoping reviews aim to identify a broad collection of relevant literature; therefore, all research designs were included. • Gray literature that met eligibility requirements was included. • Studies without an accessible PDF file were excluded.

Scoping reviews are iterative, and inclusion and exclusion criteria are expected to be refined as the reviewers become more familiar with the literature (Levac et al., 2010). As such, the initial search strategy for this review pulled all articles published beginning in 1994. The title and abstract screening process revealed that all U.S.-based research from 1994-2004 evaluated outcomes related to unpaid family leave due to the absence of a state-level paid family leave policy until 2004. Therefore, inclusion and exclusion criteria were updated to exclude studies published before 2004 or with study periods with data exclusively before 2004. Notably, many

studies utilized a pre and post-test research design, in which data collected before policy implementation was compared to data collected following the policy implementation. In these instances, studies conducted with pre-2004 data were included if the study period extended to a post-policy implementation period.

In the first stage of the study selection process, only the title and abstract of articles were reviewed for eligibility. Title and abstract screening were conducted for 5,600 articles; 5,376 were screened out as irrelevant. The remaining 224 articles moved on to the second stage of the study selection process: a full-text review. Titles and abstracts can provide limited information about the contents of an article; therefore, a full-text review involves reading the entire text to assess eligibility (Nilsen & Bernhardsson, 2019). A PDF file of each article was uploaded into *Covidence*, and 38 studies were included for final data extraction.

Charting the Data

The next stage involved extracting data from each article and charting, summarizing, and reporting the findings (Levac et al., 2010; Tricco et al., 2018). A data charting form was developed in *Covidence* to sort, organize, and chart source material according to key issues and themes. This form (see Appendix B) included bibliographic information (author(s), publication year, title, journal/source), study characteristics (design, objective, research question(s), state setting, study duration), methods (data source, variables, outcome focus, data analysis), key findings (results, limitations, recommendations for future research/practice).

Summarizing and Reporting the Findings

Descriptive characteristics of the studies will be presented to highlight the study locations, sample populations, and other vital outcomes. This will provide a comprehensive

overview of the nature of domestic paid family leave literature concerning child and family outcomes.

A more in-depth thematic analysis was conducted to identify prominent and recurrent themes in the articles and to summarize the findings as the themes relate to the research question. Thematic analysis is an inductive qualitative methodology used to identify, analyze, and report patterns, or themes, found among the data (Braun & Clarke, 2006). Braun and Clarke's (2006) six-step stages of thematic analysis (familiarize yourself with the data, generate initial codes, search for themes, review themes, define and name themes, and produce the report) were followed to report the findings of this scoping review.

Due to the inductive nature of thematic analysis, this process began in the initial stages of study selection. Through this process, initial codes were developed as "tags" within the *Covidence* software (e.g., infant vaccination rates), facilitating the identification of similarities between the articles. During the full-text review and data extraction stages of the scoping review, I compared the coded tags to identify prominent themes using an inductive iterative process. As I became more intimately involved with the texts through the data extraction process, I was able to refine the codes and themes to reflect the emerging themes and trends in the data. Following the data extraction process, I reviewed the themes and critically analyzed their distinction from and relationship to one another. This allowed me to identify general themes and sub-themes.

I conducted the thematic analysis on 100% of the studies. Thematic analysis is a subjective process influenced by my professional experience as a child welfare social worker and personal experience as a working mother of a young child. To increase reliability and minimize the impact of these potential biases, I invited an undergraduate social work student to serve as a second coder, who reviewed, at random, 50% of the studies. The *Covidence* software allowed

independent, unbiased review and data extraction of the final 38 studies. No significant discrepancies were identified between the two raters, resulting in a consensus on the data extraction and identified themes. Four general themes were identified: 1) child outcomes, 2) parent outcomes, 3) family outcomes, and 4) labor market outcomes. These themes encompassed subsequent sub-themes that helped parse out the data in more detail. Finally, the themes and sub-themes were organized narratively, and the results were drafted.

Results

Descriptive Results

The search and selection strategy yielded 38 studies published between 2013 and 2023. The majority of the publications appeared in 2019 (n = 7), 2020 (n = 7), and 2022 (n = 7). This is consistent with the trajectory of states passing paid family leave legislation in these years. Most of the papers were published in peer-reviewed academic journals. Only eight included studies were found in the gray literature, with three later appearing in a peer-reviewed journal. The studies were published in journals covering various disciplines, including economics, public policy, child development, and family studies. All but three studies were quantitative. Over three-quarters of the studies (n = 29) utilized a difference-in-difference method. A breakdown of the analysis methods can be seen in Table 2.3, which details the study characteristics of all 38 included studies. More than 80% (n = 32) of the studies examined outcomes related to California's paid family leave program, while other states included in the research were New Jersey (n = 8), Rhode Island (n = 2), and New York (n = 6). The articles were categorized into four themes based on the outcomes described in the studies' findings: child outcomes, parental outcomes, family outcomes, and labor force outcomes. These themes are not mutually exclusive, as many studies reported outcomes relevant to multiple categories. Overall, the findings from the

included studies suggest that paid family leave policies positively impact various aspects of child, parent, and family life.

Table 2.3

Study characteristics (n = 38)

Characteristic	Count
Year of Publication	
2013-2015	5
2016-2019	14
2020-2023	19
State	
California	32
New Jersey	7
Rhode Island	2
New York	7
Study type	
Qualitative	2
Mixed Methods	1
Quantitative	35
Difference-in-difference	29
Interrupted time series	1
Linear regressions	1
Regression kink	1
Hierarchical regression	1
Chi-square tests	1
Repeated measures design	1
Data source	
National administrative data	27
State administrative data	4
Nat'l + State admin. data	1
State longitudinal data	1
Primary data	4
Nat'l admin. + primary data	1

Focal Research Themes

The thematic analysis yielded four themes related to the socioecological model of child maltreatment prevention. A thematic distribution of the 38 studies can be seen in Table 2.4. In the following sections, I will describe each theme.

Table 2.4

Thematic distribution of studies

Study ID	Child Outcome	Parental Outcome	Family Outcome	Labor Market Outcome
Bailey et al., 2019		☒		☒
Bana et al., 2020				☒
Bartel et al., 2015				☒
Baum & Ruhm, 2016				☒
Bedard & Rossin-Slater, 2016				☒
Brito et al., 2022	☒	☒	☒	
Bullinger, 2019	☒	☒	☒	
Bkyer, 2016				☒
Cardenas et al., 2021		☒		
Chatterji et al., 2022	☒			
Chen, 2023	☒			
Coombs et al., 2022		☒		
Das & Polachek, 2015				☒
Dennison et al., 2022		☒		
Doran et al., 2020		☒		
Golightly, 2022		☒		
Hamad et al., 2019		☒		
Huang & Yang, 2015		☒		
Hutcheon et al., 2022	☒			
Hwang et al., 2021		☒		
Irish et al., 2021		☒		
Jones & Wilcher, 2020				☒
Kang et al., 2022				☒
Klevens et al., 2016	☒			
Lee et al., 2020		☒		
Lenhart et al., 2021			☒	
Lichtman-Sadot, 2014		☒		
Lichtman-Sadot & Bell, 2017	☒			
Montoya-Williams et al., 2020	☒	☒		
Oloomi, 2016	☒			☒
Pac et al., 2019		☒		
Pihl & Basso, 2019	☒			
Rodgers, 2020			☒	
Rossin-Slater et al., 2013				☒
Roy Choudhury & Polachek, 2021	☒			
Setty et al., 2020				☒
Stanczyk, 2019			☒	

Table 2.4 (cont'd)

Winston et al., 2019	☒

Child Outcomes

Eleven studies examined the effects of state-level paid family leave policies on children's health outcomes. These studies measured various aspects of children's health, extrapolating into five sub-themes: birth outcomes, infant vaccination rates, infant hospitalizations, infant cognitive development, and parent-reported child health. Eight studies focused on California's paid family leave (CA-PFL) program, while the remaining three focused on New York's program. The studies consistently found that paid family leave policies positively impacted child outcomes.

Birth Outcomes. Three studies have demonstrated the positive effects of CA-PFL on infant birth outcomes. Oloomi (2016) found that CA-PFL positively impacted infant health outcomes for babies born to women over 35. This resulted in a 1% decrease in low birthweight births, a 0.5% decrease in extremely low birthweight births, a 1.5% decrease in premature births, and a 3.1% decrease in Cesarean section births. Montoya-Williams et al. (2020) found a 12% decrease in postneonatal mortality rates after implementing CA-PFL. Additionally, there was an increased likelihood of low birthweight births among privately insured women in CA after the implementation of PFL. Chen (2023) built on these findings and reported a significant decrease of 0.135, equivalent to approximately 338 infants in neonatal mortality. This reduction was particularly prominent among infants born to married mothers and male infants.

Infant Vaccination Rates. Two studies have examined the impact of paid family leave policies on vaccination rates for children. These studies found that children living in states with paid family leave policies had higher vaccination rates compared to those in states without such policies. For instance, in California, the implementation of paid family leave resulted in a decrease of approximately 10% in late vaccinations at the population level. This was especially

beneficial for families below the poverty line (Roy Choudhury & Polachek, 2021). Similarly, a study conducted in New York revealed that the implementation of paid family leave was associated with a slight increase in the likelihood of infants receiving all recommended vaccinations. Additionally, it showed a significant 28% reduction in the probability of infants not receiving vaccinations by two months old (Chatterji et al., 2022).

Infant Hospitalizations. Several studies have analyzed hospital admissions data to examine the health outcomes of children, with a focus on infant health in California and New York. In California, Pihl and Basso (2019) found a decrease in infant hospital admissions following the implementation of paid family leave. This decrease was particularly notable for gastrointestinal viruses (9-15%) and upper respiratory infections (25-33%), reducing hospital costs by approximately $54.6 million. Similarly, in New York, Hutcheon et al. (2022) observed a 30% decrease in hospital admissions for respiratory syncytial virus (RSV) and acute lower respiratory tract infections in infants eight weeks and younger following the implementation of New York's paid family leave policy. The benefits of these policies were more pronounced in rural areas compared to urban areas. They were particularly beneficial for infants covered by Medicaid, although neither of these effects were statistically significant.

Infant Cognitive Development. Two studies investigated the effects of paid family leave policies on infant brain development. One study focused on electroencephalography (EEG) power as an indicator of cognitive development, while the other explored the potential of paid family leave in preventing pediatric abusive head trauma.

EEG power is the brain's electrical activity strength, measured using EEG electrodes. Brito et al. (2022) found that paid family leave was associated with increased EEG power in the higher frequency bands of high alpha (associated with a relaxed and calm state) and beta

(associated with active thinking, concentration, and cognitive engagement). On the other hand, paid family leave was found to reduce EEG power in the lower frequency band theta, which is linked to memory retrieval and consolidation, and creativity. These findings suggest that receiving paid time off work after childbirth may positively affect early brain activity and development.

Pediatric abusive head trauma, caused by violent actions from a caregiver, can lead to long-term impaired cognitive functioning in children (Chevignard, 2014). Thus, this issue was thematically organized as a child outcome. Klevens et al. (2016) found that the implementation of CA-PFL was associated with a decrease in hospitalizations for pediatric abusive head trauma among infants under one and two years old. Specifically, the hospitalization rate of pediatric abusive head trauma decreased by 5.1 and 2.8 per 100,000 infants, respectively, in California compared to states without paid family leave programs (Klevens et al., 2016).

Parent-Reported Child Health. Finally, two studies examined the impact of CA-PFL on children's health. CA-PFL was found to improve the overall health status of infants, with a 5-10% increase in parents reporting their infants to be in very good or excellent health (Bullinger, 2019). Despite an increase in reported food allergies, there was a decrease in cases of asthma and respiratory allergies. Additionally, implementing CA-PFL led to a 21-35% decrease in infant healthcare visits, indicating improved infant health. Positive findings were also reported for school-aged children in California. CA-PFL was associated with a lower risk of being overweight or being diagnosed with ADHD, hearing, or communication problems by the time these children reached kindergarten (Lichtman-Sadot & Bell, 2017). Parents of school-aged children also tended to rate their children's overall health more favorably and reported fewer frequent ear infections. These benefits were particularly notable for families with lower

socioeconomic status, mothers with lower educational attainment, families with English as the first language, and male children (Lichtman-Sadot & Bell, 2017).

Data Source. Most studies relied upon administrative data for their analyses. Eight studies utilized national administrative data (Bullinger, 2019; Chen, 2023; Klevens et al., 2016; Lichtman-Sadot & Bell, 2017; Montoya-Williams et al., 2020; Oloomi, 2016; Pihl & Basso, 2019; Roy Choudhury & Polachek, 2021) and two studies used state-specific administrative data from New York (Chatterji et al., 2022; Hutcheon et al., 2022). One study collected primary data (Brito et al., 2022).

Analytic Methods. All but one study employed quasi-experimental designs to assess the impact of paid family leave. Nine studies utilized difference-in-difference design (Bullinger, 2019; Chatterji et al., 2022; Chen, 2023; Klevens et al., 2016; Lichtman-Sadot & Bell, 2017; Montoya-Williams et al., 2020; Oloomi, 2016; Pihl & Basso, 2019; Roy Choudhury & Polachek, 2021) and one study used an interrupted time series design with negative binomial regression and negative control analyses (Hutcheon et al., 2022) to estimate the effect of paid family leave on their outcomes of interest. One study utilized multiple linear regressions to test their hypotheses (Brito et al., 2022).

Parental Outcomes

Nineteen studies examined the effects of state-paid family leave on parent outcomes. Most of these studies focused on maternal outcomes, while three included paternal outcomes (Cardenas et al., 2021; Lee et al., 2020). Parental outcome studies are extrapolated into five sub-themes: parental health, fertility rates and timing, breastfeeding practices, maternal mental health, and paternal mental health. Ten studies focused on California's paid family leave program (Bailey et al., 2019; Bullinger, 2019; Cardenas et al., 2021; Doran et al., 2020; Huang &

Yang, 2015; Golightly et al., 2022; Lee et al., 2020; Lichtman-Sadot, 2014; Oloomi, 2016; Pac et al., 2019), three studies focused on New York (Brito et al., 2022; Dennison et al., 2022; Hwang et al., 2020), two studies included both California and New Jersey (Hamad et al., 2019; Irish et al., 2021), and one study examined all four states with active programs at the time (Coombs et al., 2022).

Parental Health. After implementing CA-PFL, parents in low-income families reported an increased ability to cope with their daily parenting responsibilities (Bullinger, 2019). Moreover, CA-PFL was found to be linked with a reduced likelihood of parents being overweight and a decrease in alcohol consumption (Lee et al., 2020). PFL policies (CA and NJ) decreased parents' psychological distress by 25%. These estimates were consistent between mothers and fathers (Irish et al., 2021). It is important to note that in this study, an interaction term revealed that Black and Hispanic parents experienced increased psychological distress relative to white parents, and middle-income parents experienced greater improvements in psychological distress relative to low-income parents (Irish et al., 2021).

Fertility Rates and Timing. Multiple studies conducted in California have examined the impact of paid family leave policies on women's fertility decisions and maternal outcomes. These studies found that CA-PFL has significantly affected the age at which women have their first child, reducing it by about one month. The impact was particularly significant for women over 35, who experienced a two-year reduction in the timing of their first births (Oloomi, 2016). In addition, CA-PFL has been found to increase fertility rates by 2.8% for women over 30, women with multiple children, mothers with a high school degree, and Hispanic mothers (Golightly et al., 2022). However, one study indicated that CA-PFL tended to reduce the number of children born but increased the amount of time mothers spent with their children (Bailey et al.,

2019). Implementing CA-PFL also facilitated a shift in the timing of births, as women strategically planned their pregnancies to take advantage of the policy (Lichtman-Sadot, 2014). This shift was most pronounced among first-time mothers, unmarried women, Hispanic women, and women with lower educational attainment.

Breastfeeding Practices. Four studies have shown that paid family leave positively affects breastfeeding practices. Specifically, CA-PFL has been found to increase the duration of breastfeeding by approximately 8% or 18 days (Huang & Yang, 2015; Pac et al, 2019). These positive effects have been observed in various groups, including those who experienced interruptions in phone services (increased duration of 65 days), WIC participants (increased duration of 37 days), and mothers with less than a high school education (increased duration of 63 days) (Pac et al., 2019). CA-PFL has facilitated increased exclusive breastfeeding practices (i.e., giving infants only breast milk for the first six months) (Hamad et al., 2019; Huang & Yang, 2015). This has been particularly notable among married, white, higher-income, and older mothers (Hamad et al., 2019). These findings suggest that CA-PFL has the potential to promote breastfeeding initiation among disadvantaged groups, including families that experienced interruptions in phone service, families with lower educational levels, families living in poverty, and Black mothers (Pac et al., 2019). Similar trends have been observed in New York, where NY-PFL has increased breastfeeding practices by 15%, particularly among Black and Hispanic women (Dennison et al., 2022).

Maternal Mental Health. Multiple studies consistently show that paid family leave has positive effects on maternal mental health. California's paid family leave program, in particular, has been extensively studied in this area, with four studies exclusively examining its impact on maternal mental health. These studies consistently found that CA-PFL has a positive effect on

mothers' mental health status (Bullinger, 2019), including significant decreases (27.6%) in postpartum psychological distress symptoms (Doran et al., 2020) and improvements in self-reported psychological distress (Lee et al., 2020). Vulnerable families, such as low-income mothers (Bullinger, 2019), single mothers, and young mothers (Doran et al., 2020), show even more significant improvements in maternal mental health. Partners taking advantage of paid leave also seems to contribute to positive outcomes, as mothers whose partners took paid leave experienced less of an increase in self-reported depressive symptoms and perceived stress. However, it is worth noting that a partner's leave-taking did not seem to alleviate maternal daytime fatigue (Cardenas et al., 2021).

Similar findings have been observed in New York and multi-state studies. Access to paid family leave is associated with lower maternal cortisol levels (Brito et al., 2022) and lower levels of self-reported depression and postpartum depression diagnoses (Coombs et al., 2022). One study qualitatively highlighted the benefits of paid family leave in mitigating postpartum mental health issues, including more time at home, financial security, work-life boundaries, and increased partner support. Mothers who utilized paid family leave were better able to access mental health services, get more sleep, establish breastfeeding, and bond with their babies (Coombs et al., 2022). However, one study found no direct positive relationship between paid family leave and improved mental health. Instead, this study found that the perceived fairness of the division of household labor moderated the relationship between paid family leave and maternal depressive symptoms (Hwang et al., 2020). When mothers who took paid leave perceived the division of household labor to be fair, they reported lower levels of depressive symptoms. Overall, these studies provide compelling evidence that paid family leave can have significant positive effects on maternal mental health.

Paternal Mental Health. While numerous studies have focused on maternal mental health, two studies have also examined the impact of paid family leave on paternal mental health outcomes. In addition to observing improved maternal mental health, Lee and colleagues (2020) discovered a significant decrease in alcohol use among fathers who took advantage of CA-PFL. Although there were no differences in self-reported depressive symptoms between fathers who took paid family leave and those who did not, fathers who utilized paid leave reported lower levels of perceived stress and daytime fatigue compared to those who did not take paid leave (Cardenas et al., 2021).

Data Source. Nine studies utilized national administrative data (Bullinger, 2019; Doran et al., 2020; Golightly et al., 2022; Hamad et al., 2019; Huang & Yang, 2015; Irish et al., 2021; Lee et al., 2020; Lichtman-Sadot, 2014; Pac et al., 2019). One study relied on state-level administrative data from New York (Dennison et al., 2022). One study drew from a larger longitudinal study on the transition to parenthood in a large city in California (Cardenas et al., 2021). Two studies collected primary data for their analyses (Brito et al., 2022; Hwang et al., 2020), and one study used mixed methods using national administrative data and primary qualitative focus groups (Coombs et al., 2022).

Analytic Methods. Nine studies employed quasi-experimental studies, with six employing traditional difference-in-difference analyses (Bullinger, 2019; Hamad et al., 2019; Huang & Yang, 2015; Irish et al., 2021; Lee et al., 2020; Lichtman-Sadot, 2014), three utilizing a synthetic difference-in-difference approach (Doran et al., 2020; Golightly et al., 2020; Pac et al., 2019) and one conducting a repeated measures design (Cardenas et al., 2021). Non-experimental studies used multiple linear regressions (Brito et al., 2022), hierarchical regression analyses (Hwang et al., 2020), Chi-square tests and weighted multiple regressions (Dennison et al., 2022),

and mixed methods with thematic analysis and propensity score matching and rank sum analysis (Coombs et al., 2022).

Family Outcomes

While all of the findings could be considered family outcomes, this theme was defined as studies where the outcome cannot be directly attributed to just one family member. Instead, these studies have produced findings that have broader implications for the entire family unit. As a result, five studies were identified through the search strategy that addressed family outcomes. These studies can be extrapolated into two sub-themes: family financial security and parent-child engagement.

Family Financial Security. The three studies addressing family financial security are conducted within the context of California. Firstly, Stanczyk (2019) discovered that CA-PFL reduces the risk of poverty and increases household income during the first year of a child's life. The decrease in poverty was particularly notable among vulnerable families, especially single mothers and mothers with a high school degree or less. The increase in household income attributed to CA-PFL was most significant for married mothers and those with lower levels of education. Expanding on these findings, Lenhart et al. (2021) found that CA-PFL significantly reduces food insecurity among households after the birth of a child, especially for the most vulnerable families. Positive effects on food security were most apparent among low-income households, families with more than one child, and families with parents under 30 years old. While CA-PFL appeared to reduce poverty and food insecurity, it was also found to decrease household savings. Rodgers (2020) found that CA-PFL hurt women's total savings, reducing it by about 30%. Furthermore, the ratio of savings indicated that women's savings decreased by an equivalent of approximately 1.4 months of household income (Rodgers, 2020).

Parent-Child Engagement. In theory, all of the outcomes reported in this scoping review have the potential to impact parent-child engagement. However, only two studies directly examined the effect of paid family leave on this relationship. Bullinger (2019) measured parent-child engagement by assessing the use of nonparental child care. This study found that CA-PFL reduced the use of nonparental child care by 7-12%. However, children from low-income families were less likely to benefit from this reduction, as they were more likely to rely on out-of-home child care compared to children from high-income households. Furthermore, paid family leave promotes parent engagement. Bullinger (2019) measured this by examining whether infants were read to four or more times per week and found that they were 10-20% more likely to be read to if their parents had access to paid family leave. Another study, conducted by Brito et al. (2022) and based in New York, also supports increased parental engagement. This study observed higher levels of sensitivity and reciprocity in parent-child interactions, such as maternal positive affect, gaze toward the child, acknowledgment of the child's cues, imitation, appropriate range of affect, resourcefulness, and supportive presence. These positive interactions were associated with a higher percentage of paid leave (Brito et al., 2022).

Data Source. All four studies relied on national administrative data (Bullinger, 2019; Lenhart et al., 2021; Rodgers, 2020; Stancyzk, 2019).

Analytic Methods. All four studies utilized quasi-experimental designs, with three employing a traditional difference-in-difference approach (Bullinger, 2019; Lenhart et al., 2021; Rodgers, 2020; Stancyzk, 2019) and one using a triple difference approach (Stancyzk, 2019).

Labor Force Outcomes

Paid family leave policies provide direct benefits to the family that also extend to the outer layers of the social ecology. Therefore, 13 studies focused on the relationship between paid

family leave and parents' participation in the labor force. These studies examined various aspects of labor force participation, extrapolating into four sub-themes: leave-taking behaviors, wage earnings, labor force attachment, and lived experience with paid leave. Nine studies were California-based (Bailey et al., 2019; Bana et al., 2020; Bartel et al., 2015; Baum & Ruhm, 2016; Bedard & Rossin-Slater, 2016; Das & Polachek, 2015; Kang et al., 2022; Oloomi, 2016; Rossin-Slater et al., 2013), one study was based in New Jersey (Setty et al., 2016); two studies included both California and New Jersey (Byker, 2016; Jones & Wilcher, 2020), and one study included California, New Jersey, and Rhode Island (Winston et al., 2019).

Leave-Taking Behaviors. Early research on paid family leave in California, the first state to implement such a program, focused on labor force outcomes. Studies have consistently shown that the CA-PFL program led to a significant increase in leave-taking among both mothers and fathers (Bartel et al., 2015; Baum & Ruhm, 2016; Bedard & Rossin-Slater, 2016; Rossin-Slater et al., 2013). According to Bartel et al. (2015), fathers' leave-taking increased by 46%, with a greater effect seen for first-time fathers (96%) compared to subsequent births (18%). Meanwhile, mothers' leave-taking increased by 13%. The likelihood of either parent taking paid family leave increased by 22%, and there was a 28% increase in both parents taking leave simultaneously (Bartel et al., 2015).

Under the CA-PFL program, the duration of leave also increases. Rossin-Slater et al. (2013) reported an additional 3.1-3.3 weeks of parental leave, with women with children under one doubling their leave length. Bedard & Rossin-Slater (2016) reported that women used the full six weeks offered by CA-PFL, while Baum & Ruhm (2016) reported that women took almost five additional weeks compared to their pre-policy leave duration. Not surprisingly, women were more likely to take leave in the quarter before and the two quarters after childbirth

(Baum & Ruhm, 2016). Conversely, men took between two and five weeks of leave (Bedard & Rossin-Slater, 2016), with one study reporting an additional two to three days compared to pre-policy leave-taking behavior (Baum & Ruhm, 2016). Fathers tended to take their leave within the first six weeks after birth (Baum & Ruhm, 2016).

The increased leave-taking was particularly beneficial for disadvantaged groups of women who may have previously lacked access to paid leave through their employers. The largest increase in leave taken was observed among Black mothers (10.6 percentage points), followed by unmarried mothers (7.2 percentage points), Hispanic mothers (6.2 percentage points), and mothers with a high school degree or less (5 percentage points) (Rossin-Slater et al., 2013).

Labor Force Attachment. Except for one study, California-based research found that paid family leave positively impacts labor force attachment. While Bailey et al. (2019) found a 7% decrease in employment, studies show that paid family leave encourages mothers, especially those over 35, to return to work after giving birth (Oloomi, 2016). Additionally, higher-earning parents are more likely to maintain their attachment to the labor market, and those who remained employed for four quarters after a CA-PFL claim were more likely to continue working for their pre-claim employer (Bedard & Rossin-Slater, 2016). Evidence also shows that paid family leave promotes labor force attachment among less privileged groups. Baum and Ruhm (2016) discovered that mothers with weaker labor force attachment and no access to paid family leave before the state mandate were more likely to return to work within nine to twelve months after giving birth, and they experienced improved job continuity after implementing CA-PFL. Kang et al. (2022) supported these findings, stating that CA-PFL significantly increased the likelihood of working, particularly for low-income women one year after childbirth. Moreover, Bana et al.

(2020) found that a higher benefit amount for CA-PFL was associated with a greater likelihood of women returning to their pre-leave employer and making subsequent PFL claims. Higher benefits were associated with a longer leave duration and higher earnings one year after the claim (Bedard & Rossin-Slater, 2016).

Studies conducted in New Jersey, in addition to California, have confirmed many of these findings. Short duration paid family leave has been shown to increase labor force attachment among women who would otherwise temporarily exit the labor force around the time of childbirth, especially those with lower educational attainment (Byker, 2016). By reducing labor market detachment by 20% in the year of birth, paid family leave can narrow the gap in labor force participation between mothers of young children and other women (Jones & Wilcher, 2020). New Jersey's paid family leave program has effectively offset maternal labor market detachment in the first six years after giving birth, reducing it by 50% (Jones & Wilcher, 2020).

Wage Earnings. Inquiry into the impact of paid family leave on labor market outcomes aims to understand whether such policies reverse or reduce the effect of the motherhood penalty. The motherhood penalty refers to the phenomenon where women experience a decreased likelihood of promotions and increased wage earnings after becoming mothers. To fully comprehend this issue, assessing whether paid family leave affects mothers' labor market attachment and earning potential is crucial.

The findings on earnings contradict the findings on labor market attachment. While paid family leave appears to increase labor market attachment, studies have found little evidence that CA-PFL increases women's wage earnings (Bailey et al., 2019). Moreover, CA-PFL has resulted in an 8% reduction in annual wages for new mothers six to ten years after giving birth (Bailey et al., 2019). It has also led to the unanticipated consequence of increased unemployment rates

ranging from 5% to 22% for young women and increased unemployment duration (Das & Polachek, 2015).

Lived Experiences with Paid Leave. Qualitative studies have provided valuable insight into the experiences of women who have participated in early examples of state-level paid family leave programs in the United States. These studies revealed anecdotally that these programs promote labor force attachment by alleviating financial stress, allowing for increased bonding time, allowing time for recovery and establishing breastfeeding, enabling parents to make childcare arrangements, and granting fathers access to paid leave (Winston et al., 2019). However, mothers have also reported experiencing financial hardships during their leave, often due to payment delays (Setty et al., 2016). They have expressed the need for more time and higher wage replacement (Setty et al., 2016; Winston et al., 2019), as well as concerns regarding job protection (Winston et al., 2019) and difficulties and confusion when applying for and accessing the paid family leave programs (Setty et al., 2016; Winston et al., 2016). This anecdotal evidence provides crucial data supporting future research and practice directions.

Data Source. Nine studies utilized large-scale national administrative data (Bailey et al., 2019; Bartel et al., 2015; Baum & Ruhm, 2016; Byker, 2016; Das & Polachek, 2016; Jones & Wilcher, 2020; Kang et al., 2022; Oloomi, 2016; Rossin-Slater et al., 2013), one study utilized state-level administrative data from California (Bana et al., 2020), and one study utilized both national and state level administrative data from California (Bedard & Rossin-Slater, 2016). Two studies collected primary qualitative data through focus groups and interviews (Setty et al., 2020; Winston et al., 2019).

Analytic Methods. All but one study employed a quasi-experimental design, with ten studies utilizing difference-in-difference analyses (Bailey et al., 2019; Bartel et al., 2015; Baum

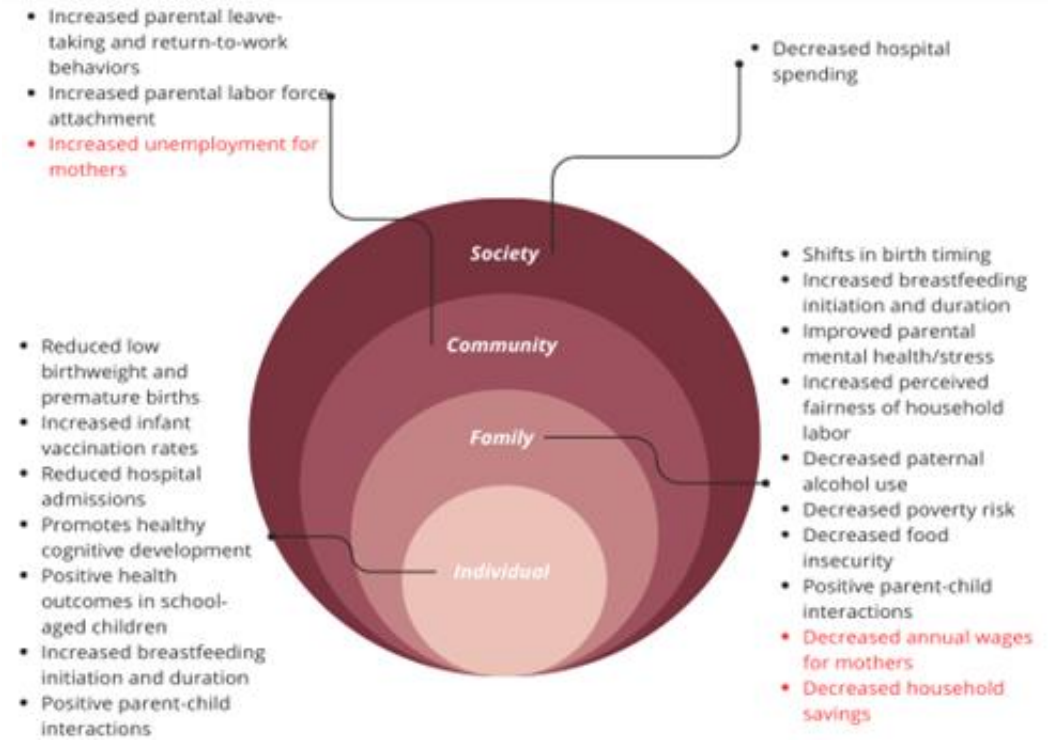
& Ruhm, 2016; Bedard & Rossin-Slater, 2016; Byker, 2016; Das & Polachek, 2015; Jones & Wilcher, 2020; Kang et al., 2022; Oloomi, 2016; Rossin-Slater et al., 2013) and one study employing a regression kink analysis (Bana et al., 2020). One study conducted an exploratory study utilizing qualitative thematic analysis (Winston et al., 2019).

Discussion

This scoping review aimed to determine how the literature has examined the impact of paid family leave on outcomes related to family well-being. The goal was to gain a better understanding of the effectiveness of such policies as a tool for preventing child maltreatment. Most of the research focused on the effects of paid family leave on parents, personally and in terms of their participation in the labor market. Only 29% (eleven out of 38) of the selected articles addressed child-specific outcomes. The socioecological model of child maltreatment prevention can provide a context for understanding how paid family leave policies can be used as a primary prevention strategy by supporting families at various levels of the social ecology. Figure 2.3 maps the findings of this study onto the socioecological model of child maltreatment. Findings in black are protective factors, while those in red are risk factors.

Figure 2.3

Socioecological map of study findings



Paid family leave research consistently reports positive impacts on child health outcomes, indicating that early-life policy interventions may provide long-term benefits beyond infancy. Paid family leave policies have been found to increase infant vaccination rates (Chatterji et al., 2022; Roy Choudhury & Polachek, 2021), decrease hospital admissions (Hutcheon et al., 2022; Pihl & Basso, 2019), and improve cognitive functioning (Brito et al., 2022). Additionally, paid family leave is associated with reduced pre- and perinatal mortality and lower rates of low birth weight and premature births (Chen, 2023; Montoya-Williams et al., 2020; Oloomi, 2016). Low birthweight and premature infants are more likely to experience various health complications, such as neurodevelopmental challenges, respiratory issues, growth and developmental delays, chronic health conditions (e.g., hypertension, heart disease, diabetes, and obesity), educational challenges, and emotional and behavioral issues (Janczewska et al., 2023; Msall et al., 2018).

These health consequences align with child-level risk factors for child maltreatment. Children with poor health, physical or mental health issues, and behavioral or developmental challenges are at a higher risk of abuse and neglect (Jaudes & Mackey-Bilaver, 2008; National Alliance of Children's Trust & Prevention Funds, 2013; Van Horne et al., 2015; Van Horne et al., 2018). Paid family leave may improve maternal and infant health during the perinatal period. Therefore, in addition to direct evidence of a decrease in hospital admissions for pediatric abusive head trauma (Klevens et al., 2016), paid family leave policies may also help reduce maltreatment risk by improving perinatal health outcomes with benefits that persist throughout childhood (Lichtman-Sadot & Bell, 2017).

There is evidence suggesting that closely timed births, particularly rapid repeat births (i.e., the birth of a subsequent child within 24 months of the index child), increase the risk for maltreatment. Specifically, children of mothers who have rapid repeat births are more likely to experience behavior problems and have lower cognitive functioning compared to children of mothers who do not have rapid repeat births (Crowne et al., 2011). Although the research in this review on paid family leave does not explicitly address birth spacing, Lichtman-Sadot (2014) found a significant change in birth distribution after implementing California's paid family leave policy. This indicates that women were able to plan their pregnancies in order to take advantage of the policy. Access to paid family leave may facilitate strategic family planning, which could contribute to interpregnancy intervals that reduce the risk of maltreatment. Furthermore, the effects of birth timing were more pronounced for first-time mothers, unmarried women, Hispanic women, and women with lower educational attainment (Lichtman-Sadot, 2014). This suggests that access to paid family leave may promote autonomy in family planning among vulnerable groups of women.

Paid family leave policies not only benefit children directly but also contribute to the well-being of parents. A sub-theme of this study identified that paid family leave policies promote breastfeeding practices, including increased breastfeeding initiation and duration (Dennison et al., 2022; Hamad et al., 2019; Huang & Yang, 2016; Pac et al., 2019). There are numerous positive outcomes associated with breastfeeding, such as nutritional benefits that support the immune system and digestive functioning, optimal growth and development, lower SIDS risk, postpartum recovery, and decreased risk of chronic diseases for both mother and baby. Furthermore, breastfeeding facilitates cost savings by eliminating or reducing expenses such as formula, bottles, and other feeding supplies while promoting healthy bonding and attachment by releasing oxytocin (U.S. Department of Agriculture, WIC Breastfeeding Support, n.d.). In addition to these benefits, breastfeeding practices are associated with decreased child maltreatment (Kremer & Kremer, 2018; Strathearn et al., 2009). Therefore, by promoting breastfeeding practices, paid family leave may create an environment that is protective against maltreatment.

The studies included in this review emphasize the importance of implementing policies that support parents' mental well-being during the postpartum period. Multiple studies have found that paid family leave policies have positive effects on the mental health of both mothers and fathers. Specifically, these policies have been associated with reduced maternal stress (Brito et al., 2022), decreased psychological distress in parents (Irish et al., 2021; Lee et al., 2020), lower levels of perceived stress (Cardenas et al., 2021), and improved maternal mental health (Bullinger, 2019; Doran et al., 2020), particularly in terms of reducing symptoms of depression (Coombs et al., 2022). Furthermore, paid family leave policies have contributed to a more equitable distribution of household labor, reducing maternal depressive symptoms (Hwang et al.,

2020). Parental stress, mental health issues, and substance abuse are well-established risk factors for child maltreatment (National Alliance of Children's Trust & Prevention Funds, 2013). Paid family leave policies provide new parents with economic resources and dedicated time away from work to manage the heightened stress associated with postpartum adjustments. Women have reported that utilizing paid family leave has enabled them to access mental health services, get more sleep, have time to establish breastfeeding practices and enjoy protected bonding time with their infants (Coombs et al., 2022). Overall, paid family leave policies can enhance parental resilience by providing access to resources, improving physical and emotional well-being, fostering healthy and supportive partner relationships, and promoting caregiver-infant bonding; these factors protect against child maltreatment (National Alliance of Children's Trust & Prevention Funds, 2013).

This review unsurprisingly focused heavily on parents' involvement in the labor market, including taking leave, returning to work, wage earnings, and maintaining a connection to the labor market. It is well-known that economic hardship is a predictor of child maltreatment. Moreover, research suggests a link between parental unemployment and child maltreatment, with unemployment significantly impacting child neglect (Brown & De Cao, 2020). This review highlights the complexities surrounding how paid family leave may affect vulnerable families in these situations. On the one hand, paid family leave helps reduce the risk of poverty and food insecurity while also promoting parents' labor force participation and attachment (Baum & Ruhm, 2016; Byker, 2016; Lenhart et al., 2021; Oloomi, 2016; Stanczyk, 2019). However, paid family leave is also associated with higher rates and longer durations of maternal unemployment, as well as lower household savings (Das & Polachek, 2015; Rodgers, 2020). While some studies indicate increased wages (Rossin-Slater et al., 2013), others report lower annual wages (Bailey et

al., 2019). Therefore, in order for this policy to truly benefit families experiencing economic hardship, labor market detachment, and a higher risk of child maltreatment, further research is needed to explore these nuanced findings and inform the development of equitable policies that prioritize the safety and well-being of at-risk families.

Paid family leave policies can promote equity across various domains, including birth outcomes, healthcare access, socioeconomic status, and labor force participation. Some studies have specifically highlighted the more pronounced effects of these policies on vulnerable groups. For example, families below the poverty line have shown a higher likelihood of timely infant vaccination (Roy Choudhury & Polachek, 2021), and a decrease in infant hospitalizations was more pronounced for infants covered by Medicaid (Hutcheon et al., 2022). Without paid family leave, low-income families may be unable to take time off work for early routine pediatric visits, resulting in delayed or missed immunizations and increased illness. These examples illustrate how paid family leave can improve healthcare access and increase parental engagement for groups that may otherwise lack vital resources.

However, contradictory findings question the equity in paid family leave benefits. While it has been noted that paid family leave reduces the risk of poverty, especially among single mothers and those with lower educational attainment (Stanczyk, 2019), and improves job continuity for women with weaker labor force attachment (Baum & Ruhm, 2016), other studies indicate that the benefits of paid family leave are more concentrated among privileged parents such as white, middle-income, and highly educated parents. For instance, Jones and Wilcher (2020) found that women with college education and advanced degrees were more likely to experience positive impacts on labor market participation. Similarly, Bedard and Rossin-Slater (2016) observed that higher-earning women were more likely to stay connected to the labor

market compared to low-earning women (38-55% versus 21-32%, respectively). Qualitative studies also confirm these disparities, with women reporting insufficient wage replacement, sometimes leading them to not participate in paid family leave programs (Setty et al., 2020; Winston et al., 2019). Lastly, one study found that Black and Hispanic parents experienced increased psychological distress relative to White parents, and middle-income parents experienced greater improvements in psychological distress relative to low-income parents (Irish et al., 2021). Disadvantaged families may be less likely to participate in paid family leave programs due to partial wage replacement and convoluted enrollment systems. Given the racial and economic disparities within the child welfare system (Sedlak & Broadhurst, 1996; Sedlak et al., 2010), future research and policy reform must investigate and address these disparities. This is essential to ensure that paid family leave can effectively serve as a primary prevention strategy for child maltreatment.

Limitations

This research is not without limitations. First, all but one of the reviewed studies did not directly assess families at risk of child maltreatment or those involved in the child welfare system. This raises questions about how the findings of these studies may apply to this vulnerable population. Future research should focus on examining paid family leave policies for families facing child maltreatment risk or those already involved in the child welfare system to gain valuable insights into the effectiveness of these policies within high-risk contexts. Second, the method of thematic analysis is subjective. Although efforts were made to address this limitation by involving a second researcher in the coding process, the inherent subjectivity of qualitative analysis remains. Scholars should continually assess the source studies and evaluate the applicability of methods and findings to their work. Lastly, the search for this review

concluded at a specific point in time, and it is acknowledged that additional studies on paid family leave have likely been published since then. Researchers and policymakers interested in this area should seek out studies published after January 2023 to ensure the latest evidence informs their work. This ongoing exploration will help fill knowledge gaps and provide updated insights into the impacts of paid family leave policies.

Policy Recommendations and Implications

The evidence provided through this review can support advocacy efforts for expanding and enhancing paid family leave policies at both the state and federal levels. Lawmakers should consider the comprehensive benefits of paid family leave and target interventions to address observed disparities and vulnerable populations. Paid family leave policies should be seen as systemic interventions supporting the family beyond individual caregivers. This includes recognizing the impact of state-level policies on economic stability, access to healthcare, and overall family well-being. Policy development should focus on perinatal support, highlighting the need for financial assistance, mental health support, and workplace accommodations. Paid family leave can facilitate caregiver-infant attachments, and campaigns promoting the importance of early attachment across disciplines can be essential. Addressing disparities and equity issues in accessing paid family leave benefits is equally important. Lawmakers should ensure that low-income families and marginalized communities have equitable access to these policies through increased benefits, outreach programs, and streamlined enrollment processes.

Future Research

Moving forward, there are several recommendations for future research to expand upon the findings of the reviewed studies and increase understanding of paid family leave as a primary prevention for child maltreatment. First, research should focus on tracking outcomes such as

child health, educational attainment, family stability, and overall well-being over extended periods. This longitudinal approach will provide a comprehensive understanding of paid family leave policies' scope and lasting effects. Next, future research could explore the relationship between increased fertility rates and child maltreatment risk. Paid family leave policies appear to increase fertility rates, while families with higher numbers of children seem to have a higher child maltreatment risk. Therefore, it would be beneficial to understand how paid family leave policies impact child maltreatment risk among families with increased fertility rates. Finally, future research should continue to emphasize the importance of a multidisciplinary approach to reducing child maltreatment. Collaboration among lawmakers, social workers, healthcare professionals, and community organizers is vital to creating comprehensive paid family leave policies and interventions that address families' diverse needs.

Conclusion

The reviewed studies provide valuable insights into the impacts of state-level paid family leave policies on various levels of the social ecology. Still, some important limitations and areas warrant future exploration. By addressing these limitations and focusing on key implications, future research can contribute a more nuanced understanding of the role of paid family leave in promoting child safety and family well-being, addressing disparities, and fostering equitable outcomes for all families.

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APPENDIX A: OVERVIEW OF U.S. STATE PAID FAMILY LEAVE POLICIES

Table 2.5

Overview of U.S. State Paid Family Leave Policies

State	Date Effective	Max. weeks for family leave	Max. weeks for own illness	Max. % of worker's weekly salary replaced	Max. dollar amount per week	Job protection beyond FMLA
CA	2004	8	52	60-70% *depending on income	$1,620 (about 100% of the statewide average weekly wage)	No
NJ	2009	12	26	85%	$1,025 (70% of the statewide average weekly wage)	Yes
RI	2014	6	30	60%	$1,007 (85% of the statewide average weekly wage)	Yes
NY	2018	12	26	67% (family leave); 50% (own health)	$1,131.08 (family leave – 67% of the statewide average weekly wage); $170 (own health)	Yes
DC	2020	12	12	90% (up to an amount equal to 40 times 150% of the D.C. min. wage) and 50% (above an amount equal to 40 times 150% of the D.C. min. wage)	$1,049; adjusted annually based on inflation	No
WA	2020	12	12	90% (up to an amount equal to 50% of the statewide average weekly wage) and 50% (above an amount equal to the statewide average weekly wage)	$1,427 (90% of the statewide average weekly wage)	No
MA	2021	12	20	80% (up to an amount equal to 50% of the statewide average weekly wage) and 50% (above an amount equal to 50% of the statewide average weekly wage)	$1,129.82 (64% of the statewide average weekly wage)	Yes

Table 2.5 (cont'd)

CT	2022	12	12	95% (up to an amount equal to 40 times the state min. wage) and 60% (above an amount equal to 40 times the state min. wage)	$840 (60 times the state minimum wage)	Yes
OR	2023	12	12	100% (up to an amount equal to 65% of the statewide average weekly wage) and 50% (above an amount equal to 65% of the statewide average weekly wage)	120% of the statewide average weekly wage	Yes
CO	2024	12	12	90% (up to an amount equal to 50% of the statewide average weekly wage) and 50% (above an amount equal to 50% of the statewide average weekly wage)	$1,100; adjusted annually after the first year to 90% of the statewide average weekly wage	Yes
MD	2025	12	12	90% (up to an amount equal to 65% of the statewide average weekly wage) and 50% (above an amount equal to 65% of the statewide average weekly wage)	$1,000; adjusted annually based on inflation	Yes
DE	2026	6 (family caregiving) 12 (parental leave)	6	80%	$900; adjusted annually based on inflation	Yes
MN	2026	12	12	90% (up to an amount equal to 50% of the state average weekly wage), 66% (above an amount equal to 50% of the state average weekly wage and up to 100% of the state average weekly wage), and 55% (above an amount equal to 100% of the state average weekly wage)	100% of the statewide average weekly wage	Yes

Note: Data from National Partnership for Women and Families (2022) and A Better Balance (2023). Maximum weeks and benefit amounts are current as of May 2023.

APPENDIX B: DATA EXTRACTION TEMPLATE

Bibliographic Information

Study ID
(First Author Last Name et al., Year)

Author(s)
List all authors
(Last Name, Initials., ...)

Year
Publication Year

Title

Journal/Source

Study Characteristics

Study Design (e.g., randomized controlled trial, cohort study, case-control study, etc.)
If difference-in-difference analysis was utilized, describe whether it was:
-difference-in-difference (DD or DID)
-difference-in-difference-in-difference (DDD)
-synthetic difference-in-difference (SDID)

Aim/Objective of study
Authors' stated aim

Research Question(s)

Authors' stated RQ

Setting (state where study was conducted

- [ ] California
- [ ] New Jersey
- [ ] Rhode Island
- [ ] New York
- [ ] Other

Study Duration

What years were analyzed?

Methods

Data

Describe what data is used for this analysis :
-If it is secondary data, name the data source
-If primary data was collected, describe the data collection process

Independent Variable

*This should be state-paid family leave - indicate which state(s). Note if they include receipt of Temporary Disability Insurance (TDI).
If a study uses FMLA or private/employer paid family leave, make a note -- this study should be excluded.

Control Variables/Covariates

Outcome (Dependent) Focus

Who is the outcome focused on?

- [ ] Mother
- [ ] Father
- [ ] Child/Infant
- [ ] Family
- [ ] Labor Force Participation
- [ ] Other

Dependent Variable

Be specific (e.g., infant early vaccination rates, women's labor force attachment, etc.)

Comparison/Control States

If they list the states used in the comparison/control group, list them here.

Data Analysis Methods

*For DID studies, make note of how they address the parallel trends assumption (if mentioned)

Key Findings/Implications

Key Findings of the Results

Recommendations for practice or future research

Noted Limitations

CHAPTER 3: STATE PAID FAMILY LEAVE AND INFANT MALTREATMENT: EXPLORING DIFFERENCES BY MALTREATMENT TYPE

Abstract

Infant maltreatment is a serious public health issue that has long-term consequences for children, families, and society as a whole. This study investigates the relationship between state-level paid family leave (PFL) policies and different types of infant maltreatment. Utilizing a multiple time-period difference-in-differences analysis on a state-year panel dataset of 48 states from 2005 to 2019, this research examines the effects of PFL policies on physical abuse, neglect, sexual abuse, and emotional abuse among infants under one year old. Three treatment states – New Jersey, Rhode Island, and New York – implemented PFL policies, while other states without PFL policies served as controls. Descriptive statistics highlight state-level variations in maltreatment rates and socio-economic factors at the state level, emphasizing the importance of context in policy analysis. Group-time average treatment effects and event-study aggregation were employed to explore the nuanced impacts of PFL policies over time. The results revealed negative trends for physical abuse, neglect, and sexual abuse, with PFL policies having a statistically significant impact only on neglect. The decline in neglect rates suggests that PFL policies may help mitigate factors contributing to neglect, affirming the importance of economic stability for family well-being. This study discusses the complexity of PFL policy effects on infant maltreatment and stress the need to consider state-level variations and trends in policy analysis. Addressing infant maltreatment requires dynamic prevention strategies that address various aspects of family functioning. This study contributes to the existing body of literature on the intersection of public policy and child welfare, offering insights for policymakers and

practitioners working towards preventing infant maltreatment through targeted interventions that promote safe and nurturing environments for infants.

Introduction

Infant maltreatment, which includes forms of abuse and neglect, is a significant public health concern that has long-term adverse effects on the well-being of children. Nearly 12% of children in the United States (U.S.) experience maltreatment (Yi et al., 2020), and infants experience the highest rates of victimization (USDHHS, 2024). Research within the last decade has highlighted the growing importance of public policy in addressing and preventing maltreatment. Growing evidence specifically highlights the benefit of economic support policy programs as a population-level prevention intervention (Klevens et al., 2015; Maguire-Jack et al., 2021). Programs such as Temporary Aid to Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), Earned Income Tax Credits (EITC), and childcare subsidies are significantly associated with maltreatment rates, where changes in social welfare policies have a significant impact on the economic stability of families.

A study conducted in Wisconsin following the 1996 welfare reform revealed that mothers who directly received their full child support payment, rather than having it diverted to the state as reimbursement for welfare assistance, had a 10% lower likelihood of having a child who became the subject of a child welfare investigation (Cancian et al., 2013). A similar effect is observed in the case of regressive taxes, which impose a greater financial burden on low-income families, used by states. McLaughlin (2018) discovered that a one-dollar increase in state cigarette tax could result in an additional 12 child maltreatment referrals per 1,000 children. Furthermore, an increase in state sales tax may lead to an increase in 5.7 child maltreatment referrals per 1,000 children (McLaughlin, 2018). Like the diversion of child support payments,

the increased financial burden caused by higher regressive taxes may affect individual and family risk factors for child maltreatment.

Conversely, the risk of child maltreatment decreases when families have more financial resources. This is evident in the example of the EITC. Research shows that an increase in state-level EITC generosity is associated with a decrease in child neglect (Berger et al., 2017; Kovski et al., 2017), physical abuse, self-reported child protective services involvement (Berger et al., 2017), overall child maltreatment rates, and the number of children entering foster care (Biehl & Hill, 2018). Specifically, refundable state-level EITC programs are associated with an 11% decrease in foster care entry rates, resulting in nearly 50 fewer children entering foster care per 100,000 (Rostad et al., 2020). A similar effect is observed with the childcare subsidy program and TANF. Childcare subsidy receipt is significantly associated with a lower risk of physical abuse, neglect (Yang et al., 2019), and supervisory neglect (Maguire Jack et al., 2019). Additionally, more generous state TANF benefits have been linked to lower rates of foster care placements (Paxson & Waldfogel, 2003), while policy provisions that limit access to TANF are associated with an increase in substantiated maltreatment cases (Paxson & Waldfogel, 2003) and increase the risk of child maltreatment (Albert & King, 2017; Beimers & Coulton, 2011; Caudill Ovwigho et al., 2003). This growing research underscores the importance of financial resources in preventing maltreatment. Policies that ensure families can retain or receive additional household income play a vital role in reducing the risk of child maltreatment.

When considering policy options as a prevention tool, it is necessary to calculate and weigh the economic costs of inaction. Beyond the psychological and physical devastation of maltreatment, there are significant economic costs, too. It is estimated that the nonfatal child maltreatment per-victim lifetime cost is $830,928. Using the estimated incidence of investigated

annual maltreatment referrals, the estimated economic burden was $2 trillion (Peterson et al., 2018). Understanding the costs of the problem can help contextualize how the cost incurred through policy interventions may offset the economic burden expected without effective prevention strategies. Paid family leave policies have emerged as a potential protective factor against infant maltreatment (Bullinger et al., 2023; Klevens et al., 2016; Pace et al., 2022; Tanis et al., 2024). Such policies aim to support caregivers through job-protected, paid time away from work for family caregiving responsibilities. Understanding the relationship between paid family leave and infant maltreatment, explicitly exploring the differences among maltreatment types, is crucial for informing public policy and support systems for parents and caregivers. This study aims to contribute to the existing research by examining these differences and uncovering the potential impact of paid family leave on infant well-being.

As research continues to excavate the utility of family-oriented policies to prevent child maltreatment, more attention is shifting toward paid family leave as one such prevention method. A robust research pool, domestically and globally, shows the benefits of paid family leave programs on maternal and child health. Only two studies, however, have directly investigated the impact of paid family leave on this significant public health issue (Klevens et al., 2016; Tanis et al., 2024). Using hospital admissions data, Klevens and colleagues (2016) discovered that the implementation of state-level paid family leave in California was associated with a decrease of 5.8 hospital admissions for pediatric abusive head trauma per 100,000 children under one year of age. Similarly, a study that examined child welfare data at the population level found that the introduction of paid family leave reduced the linear rate of change in infant maltreatment rates in states where it was implemented (Tanis et al., 2024). These studies are crucial for understanding the potential of paid family leave as a mechanism for preventing child maltreatment. However, it

is essential to note that pediatric head trauma is an exceptionally severe form of physical abuse, and using state-level infant maltreatment rates does not provide insights into specific types of maltreatment. Therefore, further investigation is necessary to determine if this protective effect extends to other forms of maltreatment.

The current research aims to build upon these important discoveries and provides valuable insight into today's discourse on paid family leave and its implications for infant well-being. The following literature review examines family leave policies in the United States and existing research on the effect of paid family leave on infant and family well-being.

Literature Review

Infant Maltreatment

The statistics and trends regarding infant maltreatment underscore the gravity of the issue and the necessity for more effective prevention strategies. Among children, those under one year of age have the highest victimization rate for child maltreatment at 22.2 per 1,000 children (USDHHS, 2024). This rate is twice as high as that for children aged one and two and more than triple the rate for school-age children. Infancy is a particularly vulnerable period in children's development due to their complete and utter dependence on caregivers. Nevertheless, several factors have been identified that elevate the risk of child maltreatment for infants. Such factors include prematurity, low birth weight, crying, and overactivity (Chen et al., 2023; Hurme et al., 2008; Wu et al., 2004). Furthermore, there are parental and familial characteristics that increase the risk of maltreatment for infants, such as maternal age, depression, low educational attainment, unemployment, alcohol and substance use, poverty, large family size, single parenthood, and lack of social support (Hurme et al., 2008; Kotch et al., 1999; Smith et al., 2023; Wolfner & Gelles, 1993; Wu et al., 2004; Zhou et al., 2006). It is imperative to address these risk factors and provide

support and resources for families to prevent infant maltreatment. We can create a safer and more nurturing environment for infants and their families by addressing the identified risk factors and offering targeted assistance. Public policies, more specifically, family-friendly policies that support the financial stability of families, may impact infant maltreatment risk and child welfare involvement throughout the U.S., proving to be a valuable strategy in safeguarding the well-being of our youngest and most vulnerable members of society. A robust, burgeoning body of research demonstrates paid family leave policies' promise in addressing child, parental, and familial outcomes.

The etiology of maltreatment, particularly neglect, is connected to poverty (Sedlak et al., 2010). Families experiencing economic hardship may struggle to meet their children's basic needs, such as food, shelter, and healthcare. Due to limited financial resources, parents may be unable to provide adequate supervision, leaving children vulnerable to neglect (Font & Maguire-Jack, 2020). Moreover, poverty can exacerbate stressors within households, resulting in strained relationships and mental health issues, which can contribute to neglectful parenting behaviors (Conger et al., 2000). Insufficient access to support systems, such as childcare services, further compounds the challenges faced by impoverished families. Understanding the relationship between poverty and neglect is necessary when evaluating potential forms of primary prevention, as merely addressing the symptoms of neglect without addressing the underlying socioeconomic factors is unlikely to yield successful, long-term solutions.

Paid Family Leave

In 1993, President Clinton signed the Family and Medical Leave Act (FMLA) into law, representing the first federal policy addressing the issue of work absence for caregiving responsibilities. The FMLA provides eligible employees with 12 weeks of unpaid and job-

protected leave. This legislation applies to public and private sector employers with at least 50 employees who have worked for at least 20 workweeks in the current or preceding calendar year (U.S. Department of Labor, n.d.). To qualify for leave under the FMLA, an employee must meet specific criteria, including working for a covered employer, having worked at least 1,250 hours during the preceding 12 months, or working for the employer for 12 non-consecutive months (U.S. Department of Labor, n.d.). It is important to reiterate that leave taken under the FMLA is unpaid, although employees may elect to use their accrued vacation or sick pay during their leave period. Leave can be taken through the FMLA for various reasons, such as the birth of a child, the placement of a child through adoption or foster care, the care of an immediate family member with a serious health condition, medical leave due to the employee's serious health condition, or qualifying circumstances related to the active military duty of a spouse or child (U.S. Department of Labor, n.d.) This policy has largely remained the same since 1993, apart from the Federal Employee Paid Leave Act (FEPLA), passed in 2019, providing up to 12 weeks of paid family leave to federal government employees (Federal Employee Paid Leave Act, 2019).

A recent study evaluating the FMLA found that 56% of American employees are eligible for leave under this law (Brown et al., 2020). However, this does not necessarily translate into access, particularly for low-wage workers earning less than $15 per hour. These workers are more likely to report needing but not taking leave for a qualifying FMLA event, often citing financial constraints as the primary reason (Brown et al., 2020). The absence of comprehensive federal leave legislation applicable to all employees has prompted several states to address this issue at the state level.

California became the first state to pass paid family leave legislation in 2002, going into effect in 2004. As of September 2023, nine states (including the District of Columbia [DC]) have

active state-level paid family leave programs: California, Connecticut, DC, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Washington. An additional five states have passed paid family leave legislation that has not yet gone into effect: Colorado, Delaware, Maine, Maryland, and Minnesota. Among active programs, there is substantial variability in eligibility criteria, duration and wage replacement, and funding mechanisms. Table 3.1 details the eligibility criteria, duration, wage replacement, and funding mechanisms of the programs in New Jersey, New York, and Rhode Island, which are the focus of this study. The information in the table that follows is gathered from a report issued by the Congressional Research Service (Donovan, 2023). Looking exclusively at the leave duration offered through each state's family leave insurance program, New Jersey and New York offer the longest leave duration at twelve weeks. Rhode Island provides up to six weeks of family leave. All three states have different formulas for calculating employee wage replacement, with some being more generous than others. However, all four states have a weekly maximum cap that ranges from $1,007 (Rhode Island) to $1,131.08 (New York). All four states fund their paid family leave programs through a payroll tax on employees. New York and Rhode Island provide job protection through their paid family leave policies; New Jersey does not.

Table 3.1

State paid family leave provisions for study treatment states

State	Duration	Eligibility Criteria	Benefit Formula and Maximum Weekly Benefit Amount	Financing
NJ	12 weeks	The same financial eligibility requirements for unemployment insurance: 20 or more calendar weeks with earnings of $260 each week in the base period or at least $13,000 in earnings during the base period.	Workers receive 85% of their AWW, up to a maximum amount equal to 70% of the statewide AWW ($1,025 per week).	Payroll tax on employees

Table 3.1 (cont'd)

RI	6 weeks	The worker must have earned wages in Rhode Island, paid into the insurance fund, and received at least $15,600 in the base period; a separate set of criteria may be applied to persons earning less than $15,600.	4.62% of wages received in the highest quarter of the worker's base period (i.e., approximately 60% of weekly earnings), up to a maximum weekly amount ($1,007).	Payroll tax on employees
NY	12 weeks	Workers must have full-time employment (20 or more hours per week) for 26 consecutive weeks or 175 days (which need not be consecutive) of part-time employment.	67% of the employee's AWW, up to a maximum amount ($1,131.08).	Payroll tax on employees

Note: AWW = average weekly wage

With the lack of a federal paid family leave framework and the financial infeasibility of FMLA for some workers, state programs have filled a vital gap in the policy landscape for working parents and caregivers. This patchwork policy landscape has provided an environment where researchers have explored what benefits paid family leave offers American families. Many of the benefits explored below can be directly applied to preventing child maltreatment.

Parental Leave and Child Well-Being

Preventing infant maltreatment requires a comprehensive approach that addresses both individual and environmental factors. Research indicates positive associations between paid family leave and child, parental, and familial well-being outcomes. Evidence suggests that implementing paid family leave in specific U.S. states improves birth outcomes and infant health. Specifically, following the introduction of paid family leave, there has been a reduction in neonatal mortality rates (Chen, 2023; Montoya-Williams et al., 2020), low birthweight births (Oloomi, 2016), delayed or missed vaccinations (Chatterji et al., 2022; Roy Choudhury & Polachek, 2021), infant hospital admissions for respiratory infections and gastrointestinal viruses, including Respiratory Syncytial Virus (RSV) (Hutcheon et al., 2022; Pihl & Basso, 2019), and cases of pediatric abusive head trauma (Klevens et al., 2016). These positive outcomes extend

into childhood, with paid family leave associated with a reduced risk of childhood obesity, ADHD, and communication difficulties (Lichtman-Sadot & Bell, 2017).

These advantages also extend to parents. Consistent research findings demonstrate that paid family leave positively impacts breastfeeding practices, including increased initiation and duration of breastfeeding (Dennison et al., 2022; Hamad et al., 2019; Huang & Yang, 2015; Pac et al., 2019). Additionally, mothers have decreased cortisol levels (Brito et al., 2022) and reported reduced psychological distress and fewer symptoms of depression (Coombs et al., 2022; Bullinger, 2019; Doran et al., 2020; Lee et al., 2020), while fathers have reported decreased alcohol use (Lee et al., 2020), lower perceived stress, and less daytime fatigue (Cardenas et al., 2021).

The benefits of paid family leave are also evident within the broader family system and significantly affect household and labor market outcomes. Paid family leave has enhanced positive interactions between parents and children (Brito et al., 2022; Bullinger, 2019). From an economic standpoint, families with young children experience a reduced risk of poverty and food insecurity (Lenhart et al., 2021; Stanczyk, 2019) and increased household income (Stanczyk, 2019). Furthermore, improved access to paid family leave has facilitated greater job continuity, return-to-work behaviors, and labor force participation and attachment among parents (Baum & Ruhm, 2016; Byker, 2016; Jones & Wilcher, 2020; Oloomi, 2016).

Theoretical Framework

This study incorporates multiple theories to analyze the complex interplay of factors that contribute to child maltreatment. By integrating the family stress model, attachment theory, and the reproductive justice framework, this research aims to provide a comprehensive understanding of how economic, social, and systemic factors influence parenting practices and child welfare.

Family Stress Model. Children from low socioeconomic status (SES) families are more likely to experience maltreatment compared to children from higher SES families (Sedlak et al., 2010). Specifically, children from low SES families are at over three times higher risk of abuse and over seven times higher risk of neglect. Poverty has been identified as a consistent predictor of child welfare involvement and neglectful parenting behavior (Slack & Berger, 2021). The family stress model suggests socioeconomic disadvantages, including low family income, parental job loss, and adverse financial events, create family pressures (Conger et al., 2000). These economic conditions increase parental stress, leading to material hardship and difficulties meeting basic needs. Under this pressure, parents may experience symptoms of depression or psychological distress, making families more vulnerable to conflict and harsh or neglectful parenting (Conger et al., 2002). All these factors contribute to the risk of child maltreatment (Akehurst, 2015; Schumacher et al., 2001; Stith et al., 2009). The family stress model has been applied successfully to diverse family systems, including various racial and ethnic backgrounds, different family structures, and urban and rural environments (Conger et al., 2002; Gutman et al., 2005; Jacson & McLoyd, 2015; Parke et al., 2004).

However, while financial pressure and parental stress explain part of the relationship between poverty and child maltreatment, other gender-related aspects need to be considered. Studies that explore factors like marital status, age, and education of mothers have been conducted (Newland et al., 2013; Warren & Font, 2015), but the family stress model may not fully encompass all gender-related aspects that influence the experience of economic hardship and parental distress. Variables such as female labor force participation, societal gender roles and expectations, power dynamics within families, and the availability of family-friendly policies

may affect how economic challenges and parental stress are experienced or mitigated, particularly in female-headed households.

Attachment Theory. Attachment theory emphasizes the importance of the mother-infant bond, providing further insight into the development of secure attachments. According to this theory, infants engage in proximity-seeking behaviors to elicit a response from the mother, with the quality of the attachment depending on the mother's responsiveness (Bowlby, 1969). Various adversities, such as poverty, mental health issues, substance abuse, and social factors, can create barriers to forming a secure attachment, a phenomenon referred to as affective starvation (Wilson & Horner, 2005). These barriers can hinder the establishment of a secure mother-infant bond.

Attachment patterns observed between mothers and infants offer insights into maternal caregiving behaviors. For example, mothers of insecurely attached infants may display insensitive or inappropriate responses to their infant's needs. Children's internalization of caregiver behavior influences their behavior and expectations in other relationships (Bowlby, 1969). These attachment patterns can also have intergenerational effects on how individuals respond to their own children's proximity-seeking behaviors.

Reproductive Justice Framework. The reproductive justice framework (Ross & Solinger, 2017) emphasizes the importance of race, class, and gender. Black feminist scholars have long provided a theoretical framework for understanding different interconnected forms of oppression (Crenshaw, 1989; Collins, 1989). Coined by women of color in the 1990s, reproductive justice focuses on addressing racism, classism, and other systemic inequities within the predominantly white reproductive rights movement (Luna & Luker, 2013; Ross, 2006). Reproductive justice asserts that all individuals have the right to raise their children in safe and healthy environments (Ross & Solinger, 2017), drawing attention to the intersecting experiences

of race, class, and gender that may crate barriers for vulnerable families and communities in realizing this right.

When viewed through the lens of reproductive justice, it becomes apparent that low-income mothers and mothers of color often face multiple stressors resulting from economic instability, limited access to resources, and systemic racism. These factors exacerbate family stress and have negative effects on parent-child relationships. Furthermore, this framework can help us understand how systemic barriers to safe and healthy environments can impact the conditions necessary for developing secure attachments. By ensuring access to comprehensive resources and support systems, reproductive justice aims to reduce the stressors that disrupt the formation of healthy attachments.

Integration of Theoretical Frameworks. Garbarino's (1977) ecological model of child maltreatment builds on Bronfenbrenner's (1977) ecological systems framework and provides a broad understanding of the contextual factors contributing to compromised child welfare. This model emphasizes the importance of early caregiver-infant attachment and reduced economic pressure in reducing the risk of infant maltreatment. State-level paid family leave policies can be a primary strategy in reducing economic pressure and allowing designated time for a secure caregiver-infant attachment.

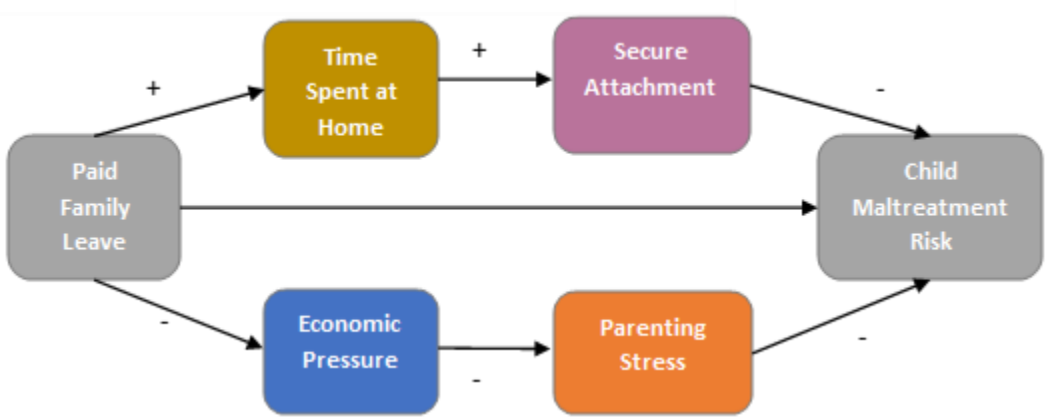
There is noticeable tension between the family stress model and attachment theory within the current context of American social welfare policy. The family stress model recognizes that working outside the home can reduce parental stress but overlooks the importance of attachment as a protective mechanism. Conversely, attachment theory fails to consider how time spent away from children can promote family well-being. This study integrates the family stress model and

attachment theory within the socioecological model, emphasizing how state-level paid family leave interacts with various risk factors for child maltreatment.

Attachment theory explains how paid family leave may promote secure attachment through protected time at home, which increases responsive parenting practices and reduces parental stress. Concurrently, the family stress model explains how paid family leave policies may mitigate increased financial pressure, even when parents are not working, to promoting stable relationships, social support networks, and access to financial resources. Moreover, incorporating the reproductive justice framework underscores the importance of addressing systemic inequalities and advocating for policies that support vulnerable caregivers in the pursuit of safe and healthy environments for their families. Figure 3.1 illustrates the specific pathways through which access to paid family leave may reduce child maltreatment risk, integrating these theoretical perspectives to promote secure attachments and mitigate family stress.

Figure 3.1

Theoretical pathways of decreased maltreatment risk



Current Study

The emerging literature on the relationship between economic support policies and child maltreatment has reported different outcomes based on the type of maltreatment. For example,

Berger et al. (2017) found that increased household income due to higher Earned Income Tax Credit (EITC) generosity was associated with a three to four percent decrease in neglect behaviors. Similarly, Kovski et al. (2021) reported that the presence of the EITC was associated with fewer reports of neglect, with a 10% increase in EITC generosity leading to even fewer neglect reports. However, neither study found strong evidence for the effects of the EITC on abuse (Berger et al., 2017; Kovski et al., 2021), indicating the need for a better understanding of neglect-specific interventions and their impact on different types of maltreatment. Therefore, this study aims to investigate how state-level paid family leave may affect each different type of infant maltreatment.

Currently, limited research directly examines the effect of paid family leave on infant maltreatment. Existing studies either focus on a narrow outcome of pediatric abusive head trauma (Klevens et al., 2016) or provide a broad overview of state maltreatment rates encompassing all types of maltreatment (Tanis et al., 2024). This study aims to fill this gap by examining the impact of state-level paid family leave on different types of infant maltreatment and discussing the implications of any differential findings. Using a multiple time-period difference-in-difference analysis (Callaway & Sant'Anna, 2021a), I analyzed a state-year panel dataset of administrative child welfare data to understand how paid family leave affects physical abuse, neglect, sexual abuse, and emotional abuse in infants under one year. The research question addressed in this study is: *What is the relationship between the presence of state-level paid family leave policy and different types of infant maltreatment (i.e., physical abuse, neglect, sexual abuse, emotional abuse)?*

Methods

Data and Sources

This study used population-level, administrative child maltreatment data from the National Child Abuse and Neglect Data Systems (NCANDS) Restricted Child File. This administrative data set contains child-level data for all child maltreatment reports investigated by child protective service agencies in all 50 states, the District of Columbia, and Puerto Rico. A panel data set was constructed using NCANDS data; covariates were obtained from publicly available data sources. Data from 2005 through 2019 were included to capture trends in maltreatment rates for several years before state-level paid family leave policies were implemented.

Exposure. The exposure of interest was whether a state had implemented a paid family leave policy. The study duration was fundamental in determining how to operationalize exposure for this study. The independent variable for this study is binary (0 = no paid family leave; 1 = active paid family leave), indicating whether a state has a paid family leave policy during each year of analysis. The study duration began in 2005 because of several issues inherent to the NCANDS data. First, in 2003, NCANDS switched from collecting data on a calendar year to a fiscal year. This caused a permanent problem with the NCANDS data because the last three months of the calendar year 2002 were the first three months of the fiscal year 2003. Therefore, if I included 2002 in the data for this study, I would be counting any reports that occurred during those three months twice. Additionally, the reporting in 2003 and 2004 continued to be inconsistent. There was substantial missing data from states and erroneous data reporting that could skew results. Therefore, I decided to begin the study in 2005, when the data was more

stable. Further, there is emerging speculation about the impact of COVID-19 relief policies, such as the American Rescue Plan, on child outcomes, particularly child maltreatment (Campbell et al., 2023; Thomson & Ryberg, 2023). To avoid conflating the results with any COVID-19 policy responses, I concluded the study period in 2019 before the onset of the pandemic. Four states have an active paid family leave policy during this study timeframe: California, New Jersey, Rhode Island, and New York. California was eliminated because this study did not capture pre-intervention data. Therefore, in this study, New Jersey, Rhode Island, and New York, implementing paid family leave in 2009, 2014, and 2018, respectively, serve as treatment states.

Outcome. The outcome of interest using NCANDS data was the incidence rate of screened-in referrals for physical abuse, neglect, sexual abuse, and emotional abuse per year per 1,000 children younger than one year old in each state. Maltreatment referrals made to child protective service agencies satisfy intake criteria for an investigation of one or several types of maltreatment. Following an investigation, the concern for maltreatment may be determined to be substantiated or unsubstantiated. When more than one child is included within the same referral, each child counts as a separate case. If multiple types of maltreatment are included in the same referral, each maltreatment type counts as a separate case. If the same child is included on a referral more than once per year, that child is counted each time a referral is made. Population estimates were obtained from the Population Division of the U.S. Census Bureau to calculate maltreatment rates by year-state.

The decision was made to include all allegations instead of only substantiated cases. Prior research has demonstrated a lack of consistency in the process through which maltreatment cases are substantiated. This inconsistency can be due to caseworker differences, subjectivity, and variability among agency, county, and state policies and procedures (Font & Maguire-Jack,

2015). Several studies have found similarities between parental recidivism or re-report rates for maltreatment between cases that have been substantiated and those that were unfounded (Drake et al., 2003; Hussey et al., 2005; Kohl et al., 2009; Kugler et al., 2019). Similarly, research indicates that children who are the subject of a child maltreatment allegation but screened out without investigation continue to experience risk factors that contribute to their vulnerability to child maltreatment; thus, these children may be more likely to be re-reported to CPS in the future (Dumas et al., 2015; Putnam-Hornstein et al., 2015). Therefore, all report allegations submitted to NCANDS by states were considered for inclusion in this study sample.

Covariates. Four state-level variables were included as possible confounders based on economic, educational, and family factors associated with child maltreatment outcomes: educational attainment, poverty, labor force participation, and single parenthood. Educational attainment is defined as the percentage of the state population between the ages of 25 and 64 who are not high school graduates. Poverty data is the percentage of children under five living in families with incomes below the federal poverty line. Labor force participation data is defined as children under six whose resident parent is not in the civilian labor force. The single-parent variable is the percentage of children under age 18 who live with a single parent in a family or subfamily. Within this definition, single parents may include cohabiting couples and do not include children living with married stepparents. Data for all four covariates were obtained from the Annie E. Casey's Kids Count Data Center. Educational attainment, poverty, and single-parent data are sourced from a Population Reference Bureau analysis of the U.S. Census Bureau, Census Supplementary Survey, and American Community Survey. Labor force participation data is sourced from a Population Reference Bureau analysis of data from the U.S. Census Bureau, American Community Survey.

I utilized multiple strategies to assess the potential of multicollinearity among covariates. First, a correlation matrix established that all four covariates had moderate or strong positive correlations (Table 3.2). I assessed the severity of multicollinearity by calculating the variance inflation factor (VIF) values for all four covariates. VIF values measure the correlation among variables in a regression model. Values begin with one with no upper limit; a VIF value of one represents no multicollinearity, and higher values indicate more multicollinearity. VIF values higher than five threaten the accuracy of results in regression analyses (Kim, 2019). The VIF values for the proposed covariates for this study all fell below the acceptable threshold, never reaching above a VIF of three (Table 3.3). As such, all four covariates remained included in the study.

Table 3.2

Covariate correlation matrix

	Edu. Attainment	Family Poverty	No Labor Force	Single Parent
Edu. Attainment	1.0000	0.7025	0.6042	0.4988
Family Poverty	0.7025	1.0000	0.7383	0.6397
No Labor Force	0.6042	0.7383	1.0000	0.6060
Single Parent	0.4988	0.6387	0.6060	1.0000

Note: Covariate definitions: Edu. Attainment = state percentage of people the ages of 25 and 64 who are not high school graduates; Family Poverty = state percentage of children under five living in families with incomes below the FPL; No Labor Force = state percentage of children under six whose resident parent is not in the civilian labor force; and Single Parent = state percentage of children under age 18 who live with a single parent in a family or subfamily.

Table 3.3

Covariate variance inflation factors

	VIF
Edu. Attainment	
Family Poverty	2.5225
No Labor Force	2.3552
Single Parent	1.8134
Family Poverty	
Edu. Attainment	1.6471
No Labor Force	1.9555
Single Parent	1.6528

Table 3.3 (cont'd)

No Labor Force	
Edu. Attainment	1.9905
Family Poverty	2.5311
Single Parent	1.7066
Single Parent	
Edu. Attainment	2.0390
Family Poverty	2.8463
No Labor Force	2.2706

Note: Covariate definitions: Edu. Attainment = state percentage of people the ages of 25 and 64 who are not high school graduates; Family Poverty = state percentage of children under five living in families with incomes below the FPL; No Labor Force = state percentage of children under six whose resident parent is not in the civilian labor force; and Single Parent = state percentage of children under age 18 who live with a single parent in a family or subfamily.

Study Design

This study used difference-in-difference (DiD) empirical analysis to estimate the treatment effect of state-level paid family leave policy on the rate of infant maltreatment investigations by maltreatment type (i.e., physical abuse, neglect, sexual abuse, emotional abuse, and other maltreatment). Difference-in-difference is a quasi-experimental design in which panel-data methods are applied to longitudinal sets of group means when certain groups are exposed to the causing variable of interest and others are not (Angrist & Krueger, 1999). DiD is particularly useful when randomization is not feasible. As such, this model is appropriate for estimating changes in economic environments and is often used when examining policy changes, providing vital information where a controlled or natural experiment may not be possible (Schwerdt & Woessmann, 2020). In the absence of a true experiment, DiD uses longitudinal data from treatment and control groups to obtain an appropriate counterfactual. The counterfactual is then used to estimate a causal effect of the policy in question, so long as certain assumptions are met, which will be further discussed below.

The DiD model is implemented by taking two differences between group means in a specific way, which can be thought of in three parts. In the context of this study: 1) the before-

after difference in the mean of annual infant maltreatment by maltreatment type for states with paid family leave policy), 2) the before-after difference in the mean of annual infant maltreatment by maltreatment type for states without paid family leave policy), and 3) subtracting the second difference from the first difference, resulting in the impact estimation (or difference-in-differences) that can be interpreted as the causal effect of paid family leave policy.

A DiD analysis can be performed in a regression framework where a dummy variable is constructed for whether or not the state is in the treatment group (*Rx* in the model below); another dummy variable is constructed for whether or not it is the post-period (*post* in the model below); and an interaction variable is constructed as the product of those two variables (*Post * Rx* in the model below) (Remler & Van Ryzin, 2015). The following equation represents a generic DiD model, where b_{Rx} reveals the difference in outcome (y) between treatment and comparison during the pre-period (assumed to stay constant over time), b_{post} reveals the difference in outcome (y) between post-period and pre-period for the comparison group (the trend that is assumed to be the same for both groups), b_{int} reveals the difference in difference outcome (y) – how much more or less the treatment group changes than the comparison group (the presumed causal effect of the treatment):

$$y = a + b_{Rx} Rx + b_{post} Post + b_{int} (Post * Rx)$$

This regression framework for DiD is important because it can be extended to include control variables (*Cont* in the model below) that may capture important differences between the treatment and comparison groups:

$$y = a + b_{Rx} Rx + b_{post} Post + b_{int} (Post * Rx) + b_{cont} Cont$$

This difference-in-difference (DiD) model has been expanded to allow multiple intervention time periods in the model (Callaway & Sant'Anna, 2021a). This study utilized this deviation from the canonical DiD setup to include all three treatment states (i.e., New Jersey,

Rhode Island, and New York), with one control group (i.e., states without a paid family leave policy). Analysis was conducted using the *did* package in R v. 4.3.2 (Callaway & Sant'Anna, 2021b). The model compared changes in infant maltreatment rates by maltreatment type for the treatment states before and after implementing the state-level paid family leave policy to correspond with differences among the control group unlikely to be affected by the policy (i.e., states without a state-level paid family leave policy).

Results

This study analyzed 705 state-year observations of NCANDS data for 48 states between 2005 and 2019. The infants in the census of maltreatment reports were under the age of 1 year. New Jersey, Rhode Island, and New York are the treatment states. California was excluded as a potential treatment state due to the lack of pre-intervention treatment required for the analysis. All U.S. states, including Puerto Rico, without an active paid family leave policy, were considered for inclusion within the control group. North Dakota, Oregon, and Puerto Rico were eliminated from this study due to missing data.

Descriptive Statistics

Table 3.4 presents descriptive statistics for the treatment states and control group for the selected outcome and control variables. The mean and standard deviation of each variable are presented for the overall sample period (2005-2019), the pre-PFL period (2005-2008), and the post-PFL period (2009-2019). It should be noted that this study contains multiple treatment time periods; thus, for descriptive statistics, the post-PFL period began in 2009 when New Jersey implemented their paid family leave program. Rhode Island and New York did not implement their respective programs until years later; this difference in implementation period is taken into account in the empirical analysis. The mean rates of the various types of infant maltreatment

(e.g., physical abuse, neglect, emotional abuse, sexual abuse) vary across states and time periods. Of the treatment states, Rhode Island consistently shows higher mean rates compared to New Jersey and New York for neglect and emotional abuse. Rhode Island also exhibits higher mean rates of family poverty, labor force non-participation, and single parenthood compared to New Jersey and New York. In contrast, New York exhibits the highest mean levels of adults with less than a high school diploma. The descriptive statistics highlight the importance of considering state-level variations and trends when conducting this analysis.

Table 3.4

Descriptive statistics for state-level variables: Treatment and control groups

	Mean (pre-PFL)	Mean (post-PFL)	Mean (all years)	SD (pre-PFL)	SD (post-PFL)	SD (all years)
Physical Abuse						
Control Group	10.60	16.65	14.64	8.04	23.14	19.90
New Jersey	5.52	5.78	5.71	4.28	1.01	2.16
Rhode Island	6.59	17.36	14.49	0.71	5.10	6.56
New York	5.73	5.71	5.72	0.23	0.38	0.34
Neglect						
Control Group	42.73	53.45	50.82	23.84	31.52	29.29
New Jersey	20.33	47.85	40.51	17.32	4.27	15.36
Rhode Island	63.83	61.63	62.22	6.02	7.55	7.04
New York	52.16	61.00	58.64	4.15	2.36	4.91
Sexual Abuse						
Control Group	0.90	0.98	0.93	1.06	1.34	1.25
New Jersey	0.75	1.42	1.24	0.78	0.10	0.48
Rhode Island	0.21	0.11	0.14	0.11	0.10	0.11
New York	0.27	0.26	0.27	0.03	0.03	0.03
Emotional Abuse						
Control Group	4.15	5.73	5.13	6.67	12.92	11.37
New Jersey	0.02	0.02	0.02	0.02	0.02	0.02
Rhode Island	0.00	9.57	7.02	0.00	9.53	9.17
New York	0.09	0.06	0.07	0.04	0.03	0.07
Edu. Attainment						
Control Group	11.27	9.87	10.29	3.42	2.90	3.05
New Jersey	10.50	8.91	9.33	0.58	0.70	0.98
Rhode Island	12.75	10.73	11.27	0.96	1.42	1.58
New York	13.00	12.18	12.40	0.00	0.75	0.74
Family Poverty						
Control Group	20.45	21.93	21.40	5.82	6.07	5.94
New Jersey	13.25	16.55	15.67	0.50	1.97	2.26
Rhode Island	18.75	20.91	20.33	2.06	4.09	3.72
New York	21.00	22.64	22.20	0.82	2.01	1.90
No Labor Force Part.						
Control Group	8.56	8.75	8.70	2.57	2.64	2.58

Table 3.4 (cont'd)

New Jersey	7.00	7.09	7.07	0.82	0.70	0.70
Rhode Island	9.25	9.00	9.07	0.96	2.00	1.75
New York	10.50	9.91	10.07	1.73	0.94	1.16
Single Parent						
Control Group	31.96	34.55	33.86	6.60	6.19	6.26
New Jersey	28.00	30.27	29.67	0.00	0.90	29.67
Rhode Island	33.75	38.18	37.00	0.96	1.78	2.56
New York	34.00	35.45	35.07	0.00	0.52	0.80

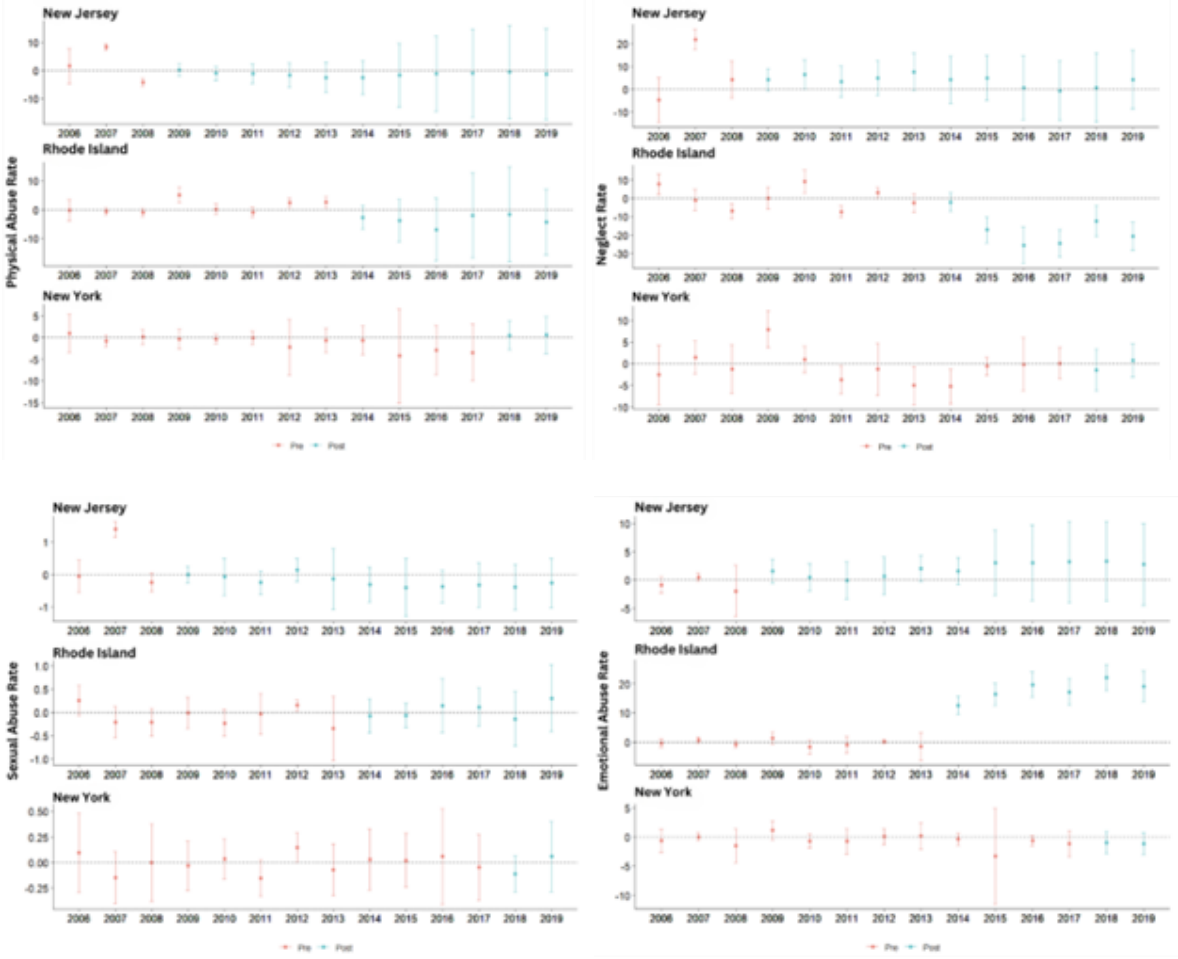
Note: The infant maltreatment rate is calculated as the number of reports per 1000 infants under one. Full same N = 705 state-years. For the descriptive statistics, the pre-PFL period is 2005-2008, and the post-PFL period is 2009 - 2019. The control group states include AL, AK, AR, AZ, CO, DE, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MI, MN, MO, MS, MT, NC, NE, NH, NM, NV, OH, OK, PA, SC, SD, TN, TX, UT, VA, VT, WV, and WY.

Statistical Analysis

The study investigated the effects of state-level paid family leave on different types of infant maltreatment. To satisfy the assumption of parallel trends, group-time average treatment effects were conducted to test the pre-intervention trends of the data using the Wald test (Wald, 1943). The p-value for the pre-test of the parallel trend assumption was reported at 0, suggesting strong evidence that there is no difference in pre-intervention trends between the treatment and control groups. Group-time average treatment effects are the parameters that need to be identified in the context of difference-in-difference with multiple periods and multiple groups. Group-time average treatment effects provide a detailed understanding of how the treatment effect varies over time within different groups. Figure 3.2 shows the group-time average treatment effects for each treatment state for all four maltreatment types. These plots help examine temporal trends by depicting fluctuations in the treatment effect estimates across years and states. However, summarizing the treatment effect in this form can be challenging (Callaway & Sant'Anna, 2021a).

Figure 3.2

Group-time average treatment effects by maltreatment type

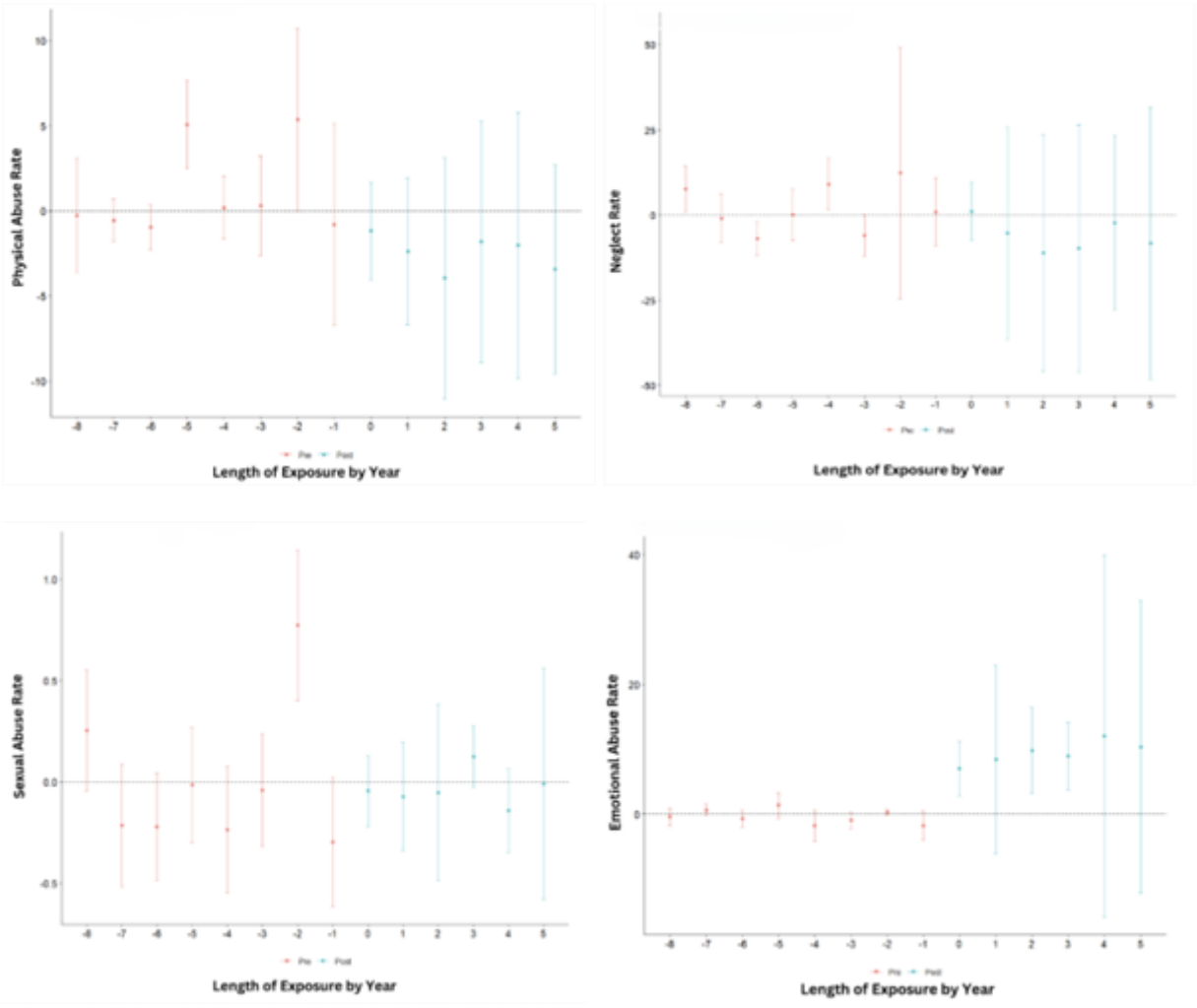


Various aggregation methods, such as event-study and group-specific effects, can aid in interpreting these results. The event-study aggregation provides a detailed picture of how the treatment effect evolves over time following policy implementation and offers a visualization of the timing and magnitude of the treatment's impact. Figure 3.3 illustrates the results of the event-study aggregation, presenting the group-time average treatment effects at various lengths of exposure to paid family leave. On the x-axis, the zero point corresponds to the time period when each state implemented its paid family leave policy. The periods before and after implementation are denoted by negative and positive integers, respectively. To ensure a robust and meaningful

analysis, I limited the time periods shown in Figure 3.3 to five post-policy implementation periods. This decision was motivated by the desire to maintain at least two states in the analysis, as New Jersey is the only treatment state with over five post-treatment data observations.

Figure 3.3

Event-series aggregation: Average treatment effect by length of exposure



The group aggregation method provides the overall average treatment effect on the treated (ATT), calculates the average treatment effect of all groups, and provides an ATT for each separate treatment state. According to Callaway and Sant'Anna (2021a), this parameter is

the preferred choice as an overall summary effect. It represents the average effect of participating in the treatment across all states that participate in the treatment in any period.

Group aggregation results are presented in Table 3.5 and show negative ATTs for physical abuse, neglect, and sexual abuse, with a positive ATT for emotional abuse. Group effects significantly predicted a decrease of 4.60 instances of neglect per 1,000 infants post-paid family leave implementation for the treatment group (SE = 1.67, 95% CI [-7.87, -1.33]*). When examining each treatment state separately, Rhode Island was also statically significant for neglect with an ATT of –17.07 per 1,000 infants after the implementation of paid family leave policy (SE = 2.54, 95% CI [-22.31, 11.83]*). The positive group effects for emotional abuse were significant (ATT 6.26, SE = 0.70, CI 95% [4.90, 7.63]*). Additionally, Rhode Island predicted an increase in 17.87 emotional abuse reports per 1,000 following the implementation of paid family leave (SE = 1.38, CI 95% [15.12, 20.63]*). Figure 3.4 shows the average treatment effect for neglect and emotional abuse by state.

Table 3.5

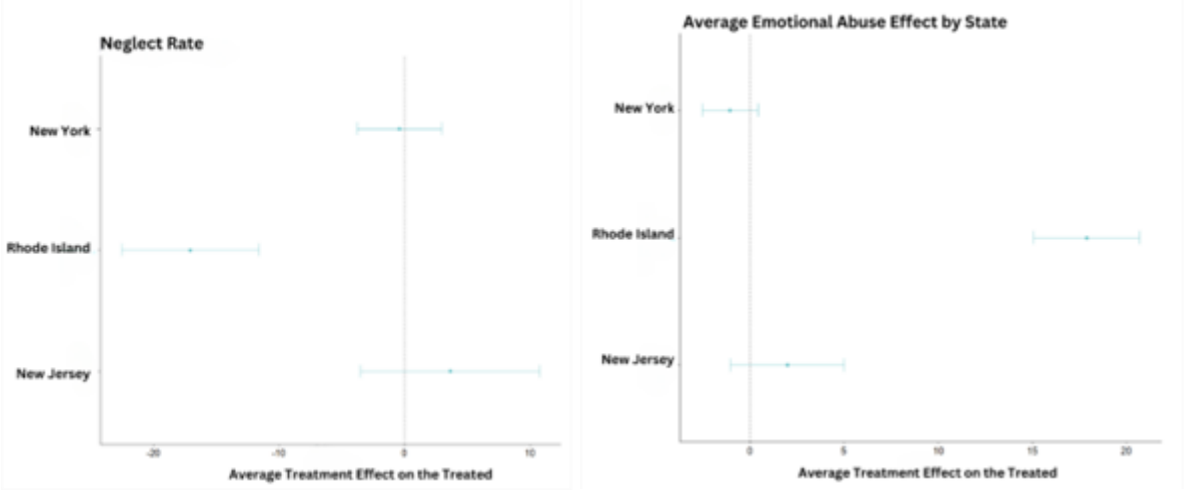
Group aggregation

Treatment State	*ATT*	*SE*	*CI 95%*
Physical Abuse	-1.42	1.83	-5.01, 2.16
New Jersey	-1.28	3.08	-7.31, 4.75
Rhode Island	-3.53	4.36	-12.07, 5.01
New York	0.54	1.45	-2.30, 3.38
Neglect	-4.60	1.67	-7.87, -1.33*
New Jersey	3.65	3.47	-3.49, 10.80
Rhode Island	-17.07	2.54	-22.31, -11.83*
New York	-0.39	1.62	-3.73, 2.95
Sexual Abuse	-0.07	0.06	-0.18, 0.05
New Jersey	-0.22	0.18	-0.58, 0.14
Rhode Island	0.04	0.17	-0.30, 0.38
New York	-0.03	0.10	-0.23, 0.18
Emotional Abuse	6.26	0.70	4.90, 7.63*
New Jersey	1.98	1.40	-0.82, 4.77
Rhode Island	17.87	1.38	15.12, 20.63*
New York	-1.07	0.74	-2.53, 0.40

Note: ATT = average treatment effect on the treated; *SE* = standard error; CI 95% = 95% confidence interval
* $p < 0.05$

Figure 3.4

Average treatment effect by state for neglect and emotional abuse



Discussion

These results provide compelling evidence of the potential effects of state-level paid family leave policies on rates of infant maltreatment. This study analyzed 705 state-year observations of NCANDS data for 48 states between 2005 and 2019 using a quasi-experimental design with difference-in-difference analysis over multiple time periods. The data indicate variations in mean rates of infant maltreatment across states and time periods. Notably, Rhode Island consistently exhibits higher mean rates of neglect and emotional abuse compared to New Jersey and New York. These statistics underscore the importance of considering state-level variations and trends in understanding the impact of paid family leave policies.

The statistical analyses revealed negative average trends for physical abuse, neglect, and sexual abuse, with a positive average treatment effect for emotional abuse. Group aggregation results indicate a significant decrease in neglect cases post-paid family leave implementation for the treatment group, particularly in Rhode Island. Conversely, there is a significant increase in

emotional abuse reports following the implementation of paid family leave, particularly pronounced in Rhode Island.

The findings suggest that paid family leave policies may offer a protective effect against neglect cases, with Rhode Island showing particularly notable results in this regard. The state-level variations suggest that local contexts, implementation strategies, and cultural factors influence the outcomes of paid family leave policies. Rhode Island offers the lowest percentage of wage replacement (60%) compared to New Jersey and New York (85% and 67%, respectively). However, it has the highest maximum weekly dollar amount in relation to the statewide average weekly wage. Even though Rhode Island's maximum benefit amount per week is only $1,007 (compared to $1,025 and $1,131.08 for New Jersey and New York, respectively), it represents 85% of the statewide average weekly wage. In comparison, New Jersey and New York offer 70% and 67%, respectively. This suggests that despite a lower percentage of wage replacement, Rhode Island may provide a more substantial monetary benefit to its residents, particularly in proportion to their average earnings.

At the same time, the unexpected increase in reports of emotional abuse following the implementation of paid family leave policies, particularly in Rhode Island, raises important considerations. According to the Rhode Island Department of Children, Youth, and Families (2016) the categorization for emotional abuse changed in 2014 to align with federal reporting standards. This change involved coding domestic violence as "emotional abuse," which led to a jump from one emotional abuse referral in 2013 to 121 referrals in 2014 in Rhode Island.

Since Rhode Island also implemented its state paid family leave program in 2014, this categorization change affects how we interpret the significant finding for emotional abuse. Because both changes occurred in the same year, the operational definitions for pre-intervention

and post-intervention emotional abuse data are distinctly different. In a difference-in-difference analysis, the unobserved counterfactual is calculated based on pre-intervention data. Therefore, the counterfactual and the observed outcome are based on those two different operational definitions of emotional abuse, rendering the treatment effect unreliable.

Despite this methodological concern, this issue warrants further investigation, as providing designated time at home to care for a new child may inadvertently leave caregivers vulnerable to intimate partner violence and young children vulnerable to emotional abuse. This possibility emphasizes the need for comprehensive support for families, ensuring that parents can access the necessary resources to navigate childcare challenges and emotional well-being during the postpartum period. This also highlights the importance of understanding other state-specific variables and factors when conducting state-level analyses.

These findings underscore the complexity of family dynamics and the need for multifaceted interventions to assist parents in creating safe and nurturing environments for their children. While paid family leave policies may alleviate some of the stressors associated with employment and caregiving responsibilities, they may also reveal underlying issues within households, such as increased stress or interpersonal conflicts, which could contribute to emotional abuse.

These contextual factors highlight the importance of considering external events and policy changes when interpreting maltreatment reporting rates and the need for a nuanced understanding of the factors influencing reporting trends over time. Over the last 30 years, rates of physical abuse and sexual abuse have consistently declined, while neglect rates have remained relatively stable (Finkelhor et al., 2024). The significant decrease in neglect rates observed in this study suggests that paid family leave policies may profoundly impact the circumstances

surrounding neglect. These findings support the assertion that policies promoting household financial stability can positively influence family well-being and reduce stressors that contribute to this particular type of maltreatment. However, addressing child maltreatment comprehensively will continue to require dynamic multi-pronged prevention strategies.

Limitations

This study has several limitations that should be noted. First, the study duration was determined by two factors. To ensure the inclusion of a substantial number of comparison states (i.e., states without paid family leave programs) while avoiding excessive missing data, the study commenced in 2005. This date aligns with the period when states consistently reported data to NCANDS. Additionally, the study intentionally concluded before the onset of the COVID-19 pandemic. This decision was made to preemptively mitigate potential confounding variables from introducing economic relief policies during the pandemic. However, these decisions come with inherent limitations. The broad inclusion criteria used for the comparison states resulted in an imbalance in group size between the control group (n = 45) and the treatment group (n = 3). Statisticians have not reached a consensus regarding the significance of this issue, and there is currently no known method to address this imbalance using the difference-in-difference method. As a result, these analyses are consistent with the existing research on DiD. In addition, there is no formal means to test for parallel trends, which is a key assumption of this method. This study calculated pre-intervention trends using a Wald test to meet this assumption, a commonly employed practice with this method. However, there is ongoing debate regarding whether this is sufficient to fulfill the parallel trends assumption (Roth et al., 2023). While the selected timeframe allowed for a comprehensive analysis of the impact of paid family leave policies, the imbalance in group size and inability to sufficiently satisfy necessary assumptions may introduce

potential biases. Future research could explore alternative methodologies or sensitivity analyses to assess the robustness of the findings.

California implemented its paid family leave program in 2004 and is the oldest and most extensively studied state with such a policy. However, due to the absence of pre-intervention data, establishing a counterfactual was not feasible, leading to California's exclusion as a treatment state in this study. It is important to note that much of the existing research on paid family leave concentrates on California. To ensure that those findings are not unique to the Californian context and to deepen our understanding of the results obtained in this study, further research is needed, mainly focusing on the specific contextual factors surrounding paid family leave in New Jersey, Rhode Island, and New York.

The third limitation resulting from the study duration is related to New York. New York's paid family leave program was implemented in 2018, resulting in only one year of post-intervention data available for analysis. This limited duration of post-intervention data poses challenges in establishing a reliable counterfactual, or baseline, for accurately assessing the treatment effect in New York. To mitigate this limitation, I decided to limit the length of exposure to five time periods in the aggregate treatment effect outputs. By doing so, I ensured that a minimum of two treatment states were included in the estimation of average treatment effects aggregated over different groups and time periods. This methodological choice aims to enhance the robustness and reliability of the analysis by providing a more stable basis for assessing the impact of paid family leave policies, particularly considering the limited number of treatment states and post-intervention data. Future research should extend the study duration to include more post-treatment data points for New York and pay attention to the potentially

confounding effects of the COVID pandemic on maltreatment rates, as well as the impact of COVID-era relief policies on families' access to economic resources and social support.

Finally, the variability in state policies poses a significant challenge when analyzing state-level effects. While each treatment state has an active paid family leave policy, the nuances of each program vary considerably. For instance, New Jersey and New York provide 12 weeks of family leave, whereas Rhode Island offers only six weeks. Additionally, each state employs a distinct formula for determining wage replacement during leave, further complicating the comparison of outcomes across states. Moreover, child protection laws are regulated at the state level, resulting in differences in reporting and response standards among the states in this study. These variations introduce complexities in interpreting the observed effects of paid family leave on infant maltreatment rates.

Policy Implications and Future Directions

The significant positive effects observed on infant neglect rates suggest promising implications for policymakers seeking to address child maltreatment through paid family leave initiatives. However, the nuanced findings emphasize the need for comprehensive support systems to complement paid family leave programs. These systems could include mental health resources, caregiver education, and community support systems. Future research could delve deeper into the mechanisms through which paid family leave policies impact infant maltreatment, focusing on the specific contexts and populations where these effects are most pronounced. Longitudinal studies tracking individual families, qualitative analyses exploring caregiver experiences, and investigations into program components contributing to protective effects could provide valuable insights.

Conclusion

This study contributes valuable insights into the complex relationship between state-level paid family leave policies and infant maltreatment. By examining multiple types of maltreatment and employing a rigorous quasi-experimental design, the findings offer nuanced insights into the potential impacts of paid family leave on child welfare outcomes. The significant effects observed in reducing infant neglect rates suggest that paid family leave policies have the potential to impact crucial aspects of child maltreatment prevention, addressing the most prevalent type of maltreatment. The study also highlights the need for further research and tailored policy interventions to fully understand and maximize the impacts of paid family leave on infant wellbeing. As policymakers continue to explore strategies to promote family well-being and prevent infant maltreatment, the findings of this study offer meaningful guidance. By understanding the effects of paid family leave on different types of maltreatment, policymakers can design more effective and targeted interventions to support families and protect vulnerable infants in our communities.

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CHAPTER 4: PAID FAMILY LEAVE AND INFANT NEGLECT: THE MODERATING ROLE OF CAREGIVER RACE AND GENDER

Abstract

During the first year of life, infants are particularly vulnerable to child maltreatment. Recent studies have shown that paid family leave (PFL) policies can effectively reduce child maltreatment during early childhood. Given that neglect is the most reported form of child maltreatment, this study aimed to examine the relationship between parental demographics, access to state PFL, and the rate of substantiated infant neglect. A state-level panel dataset was created using data from the National Child Abuse and Neglect Data System (2003-2019), focusing on substantiated cases of neglect involving infants under 1 year old, where the parent was the perpetrator. The analysis included four states with PFL policies (California, New Jersey, New York, and Rhode Island) and 45 states without PFL policies. Through a series of generalized linear mixed models (GLMM), the study estimated the effect of state-level PFL access on substantiated infant neglect while also exploring how parental characteristics may moderate this effect. The findings revealed that states with PFL access had a significantly lower rate of infant neglect compared to states without PFL policies. Specifically, the predicted proportion of infant neglect in states with access to PFL was 20% lower than in states without such access. Additionally, significant interactions were found between the proportion of female caregivers, male caregivers, and white caregivers, and PFL access. The significant interactions indicate that the impact of paid family leave access on infant neglect varies depending on the proportion of perpetrators who are male, female, and white caregivers. Based on these significant interactions, the predicted proportion of infant neglect in states with access to PFL ranged from 11-33% lower than in states without PFL. These findings highlight the protective influence of

PFL on substantiated rates of infant neglect while also emphasizing the significant ways in which caregiver characteristics, such as race, class, and gender, interact with this protective effect.

Introduction

In 2019, neglect complaints accounted for 74.9% of all child maltreatment reports (U.S. Department of Health & Human Services, 2021). Neglect can be defined as a parent or primary caregiver's failure to meet a child's basic needs (e.g., food, shelter, clothing, medical care, and supervision) to the extent that the child's health, safety, and well-being are at risk (Child Welfare Information Gateway, 2018). The consequences of neglect can be just as severe, if not more so, than those of abuse (Norman et al., 2012). Neglect is associated with various adverse outcomes, including physical health problems (e.g., malnutrition, impaired brain development, and growth delays), cognitive issues (e.g., poor academic performance, delayed and impaired language development), emotional and psychological problems (e.g., low self-esteem and insecure attachment), and social and behavioral difficulties (e.g., poor impulse control, social withdrawal, and interpersonal problems) (National Scientific Council on the Developing Child, 2012). Recent research has shown that children with alleged or confirmed neglect had significantly worse outcomes for educational attainment, employment, incarceration, and teen parenthood compared to impoverished children without maltreatment allegations (Font & Maguire-Jack, 2020).

Socioeconomic factors such as unemployment, women's labor force participation, and poverty are associated with an increased risk of neglect (Berger, 2004; Lindsey, 1994; Pelton, 1978; Sedlak et al., 2010; Slack, Holl, et al., 2004; Slack, Berger, et al., 2011). Child poverty has fallen by 59% since 1993 due to the effectiveness of U.S. safety net programs (Thomson et al., 2022). As a result, there has been growing attention to the use of economic support and public assistance policies to reduce the risk of child maltreatment, with a particular focus on the

efficacy of such policies in reducing neglect (Berger et al., 2017; Fowler & Schoeny, 2017; Kovski et al., 2021; Maguire-Jack et al., 2019; Raissian & Bullinger, 2017; Yang et al., 2019; Zhai et al., 2013).

Racial and gender disparities intersect with the risk factors for neglect. Research has consistently shown that marginalized racial and ethnic groups, as well as women, are disproportionately affected by socioeconomic challenges, which in turn increases the risk of neglect (Jonson-Reid et al., 2014; McLanahan & Percheski, 2008; Putnam-Hornstein et al., 2013). Additionally, racial disparities in poverty at the state level are associated with racial disparities in maltreatment at the state level (Lanier et al., 2014). Furthermore, gender dynamics within caregiving roles may influence the quality of care and attention given to children (Berger, 2004).

One policy intervention that warrants further investigation in the context of these disparities is paid family leave (Fortson et al., 2016). Although two studies have found promising evidence that paid family leave policies may broadly reduce infant maltreatment (Klevens et al., 2016; Tanis et al., 2024), there remains a gap in understanding its specific impact on neglect, especially concerning racial and gender disparities.

Literature Review

Research has established a significant relationship between poverty and the heightened risk of neglect (Berger & Waldfogel, 2011; Sedlak et al., 2010). Neglect often arises from complex individual, interpersonal, and systemic circumstances. These intersecting circumstances deepen our understanding of neglect and emphasize the importance of designing targeted prevention mechanisms. In particular, the intersection of gender, class, and race significantly shapes the experiences of both caregivers and infants in the context of neglect. Factors such as

socioeconomic status, access to vital resources, and societal expectations based on gender and racial identities are key determinants in these experiences. Caregivers from diverse racial and socioeconomic backgrounds, as well as women, often encounter systemic barriers that can impact their access to resources and support systems (Maguire-Jack et al., 2018; Maguire-Jack & Klein, 2015; McLanahan & Percheski, 2008). Thus, it becomes imperative to understand the distinct factors contributing to neglect, particularly within the intersections of gender, class, and race.

Understanding Neglect

Neglect is understood to be the failure of a parent or caregiver responsible for a child to provide essential food, clothing, shelter, medical care, or supervision to such an extent that the child's health, safety, and well-being are at risk of harm (Child Welfare Information Gateway, 2018). While the precise definition varies and has been debated (Dubowitz et al., 1993; Rebbe, 2018; Tang, 2008), there are five widely recognized subtypes of neglect: 1) physical neglect (failure to meet basic needs); 2) medical neglect (delaying or denying healthcare); 3) inadequate supervision (leaving a child unsupervised, exposing them to safety hazards, lack of suitable caregivers, or engaging in harmful behavior); 4) emotional neglect (isolating the child, withholding affection or emotional support, or exposing them to domestic violence or substance abuse); and 5) educational neglect (failing to enroll a child in school, disregarding their special education needs, or allowing chronic truancy (Child Welfare Information Gateway, 2018).

There is a limited understanding of how neglect occurs as a phenomenon distinct from other types of child maltreatment. Historically, the child welfare system (CWS) has focused on pathologizing parental behavior, often resulting in the criminalization of already oppressed and under-resourced parents rather than addressing systemic failures (Harp & Bunting, 2020). A

more accurate understanding of neglect should shift the focus to 1) the basic needs of children rather than the parental behavior; 2) shared responsibility across all levels of the social ecology, rather than placing blame solely on parents; 3) recognizing neglect as a heterogenous phenomenon; 4) understanding that neglect exists on a continuum, with different types and varying levels of severity; and 5) acknowledging the pattern of frequent and chronic omissions of care (Dubowitz et al., 1993). By shifting the emphasis from individual responsibility and parental culpability to a collective obligation to support families, we can create space for innovative, upstream prevention strategies for neglect. To begin, it is necessary to develop a framework that explores how gender, race, and class contribute to the specific issue of neglect.

Neglect and Class

Low-income families face a significantly higher risk of neglect compared to financially secure families (Maguire-Jack et al., 2019; Slack et al., 2004; Slack et al., 2011). According to the third National Incidence Study of Child Abuse and Neglect (NIS), children in families with annual incomes less than $15,000 were 44 times more likely to experience neglect than children in families earning above $30,000. Moreover, neglect has a stronger association with poverty than all other types of maltreatment (Sedlak & Broadhurst, 1996). While state child abuse laws ensure that poverty alone is not a sufficient reason for child protective service involvement, poverty contributes to factors that increase the risk of neglect. These factors include increased parental stress (Frame, 2001; Roberts, 1998), housing instability or homelessness (Courtney et al., 2004; Shdaimah, 2008), inadequate access to basic needs and supervision, parental substance abuse, mental illness (Roberts, 1998), and domestic violence (Doyle & Aizer, 2018). Families of color and single mother-headed households face disproportionate economic disadvantages. However, the literature struggles to determine the root causes of these disparities, and there has

been minimal recognition and intervention regarding risk factors such as classism and racism (Dettlaff et al., 2022; Harp & Bunting, 2020).

Neglect and Race

Children of color, particularly American Indian/Alaskan Native and African American children, have the highest rates of maltreatment, with 14.8 per 1,000 and 13.8 per 1,000, respectively (USDHHS, 2021). The NIS-4 found that Black children had higher rates of maltreatment compared to their white peers (Sedlak et al., 2010). The NIS-4 also reported that socioeconomic status was the strongest predictor of physical abuse and neglect (Sedlak et al., 2010). There were no racial differences in maltreatment rates apart from differences in economic conditions among racial groups (Russell & Cooper, 2011). There has been an ongoing debate about the underlying cause of this disparity. In the child welfare system, the distinction between neglect and poverty is left to the discretion of the caseworker. Data shows that Black women are more likely to be drug tested during prenatal care compared to their white counterparts (Harp & Bunting, 2020), and poor Black families are more likely to be involved with child welfare services (Dettlaff et al., 2022). Furthermore, Black families experience higher rates of child maltreatment reports (Putnam-Hornstein et al., 2013), investigations (Fluke et al., 2011), substantiations (Putnam-Hornstein et al., 2013), and out-of-home child removals (Maguire-Jack et al., 2020) compared to white families. Race may serve as a proxy for disparities, oppression, and increased surveillance due to their membership in a racialized group (Zuberi, 2001, cited in Thomas et al., 2022).

Neglect and Gender

Neglect was first differentiated from abuse by Leontine Young (1964), who defined neglect as the failure of emotionally needy mothers to provide adequate care for their children. In

the United States, there is a prevailing belief that women bear responsibility for childcare. Thus, failure to care for children can be viewed as a failure of women. This gendered blame, also known as mother blaming, has influenced child welfare policies and practices, particularly regarding poor mothers, single mothers, and mothers of color (Armstrong, 1995; Azzopardi, 2022; Roberts, 2002; Swift, 1995; Woodward, 2021). Mother blaming is reinforced by the neglect subtype of 'failure to protect,' where mothers can be held responsible for domestic violence or sexual abuse, regardless of the identity of the perpetrator or their own victimization. In such cases, mothers are seen as having failed to protect their children from harm (Azzopardi, 2022). This standard disproportionately affects racialized women (Henry et al., 2020).

Historically, the child welfare system has not adequately engaged fathers, perpetuating the belief that mothers are the primary caregivers and fathers are exempt from childrearing responsibilities (Gordon et al., 2012; Strega et al., 2008). Consequently, the services and standards created by the child welfare system primarily target and engage mothers, perpetuating a standard known as intensive mothering. This standard expects mothers to invest considerable time, energy, and resources into raising their children in a child-centered, expert-guided, emotionally immersive, labor-intensive, and financially expensive manner (Hays, 1996). However, these ideals of mothering are based on the experiences of middle-class, white, stay-at-home mothers, often disregarding the parenting strategies passed down through generations, cultural variations in parenting, extended kinship networks, and fictive kin networks relied upon by many low-income families, single mother-headed families, and families of color.

Neglect can be counteracted by providing basic needs and a safe, consistent environment (Feely et al., 2022). Support, maternal employment (Duva & Metzger, 2010), and access to economic resources decrease the risks associated with poverty and decrease child protective

services involvement and out-of-home child removals (Berger, 2006; Maguire-Jack et al., 2021).

Economic Policies and Neglect

The literature emphasizes the importance of policies that can mitigate family stress and prevent neglect by addressing economic hardship. Specifically, the Earned Income Tax Credit (EITC) has been associated with decreased neglect, particularly among low-income single mothers (Berger et al., 2017). Additionally, states with more generous EITC programs witnessed a decrease of 241 neglect reports per 100,000 children (Kovski et al., 2021). Similarly, an increase in the state minimum wage has been associated with lower neglect rates (Livingston et al., 2021; Raissian & Bullinger, 2017), with a stronger effect observed for children under five years old compared to school-aged children (Raissian & Bullinger, 2017). However, these findings did not hold for families with an annual household income below $30,000 (Livingston et al., 2021). While raising the minimum wage may protectively benefit certain families, it could also increase financial strain for those in deep poverty by potentially disqualifying them from means-tested resources they rely on as income.

Positive effects have been observed for programs that provide in-kind benefits. For example, receiving childcare subsidies has been associated with a decrease in neglect, particularly regarding supervisory neglect (Maguire-Jack et al., 2019; Yang et al., 2019). Further research provides valuable insights into the impact of policies to alleviate economic hardship in conjunction with supportive case management services. For example, research has found that families referred for housing vouchers and dedicated housing case management services experienced a significant decrease in neglect compared to families who only received the voucher (Fowler & Schoeny, 2017). Head Start is another valuable program that offers free early

childhood education and supports families through case management. Research has demonstrated that children enrolled in Head Start were less likely to experience neglect compared to children in other center-based childcare arrangements (Zhai et al., 2013). This highlights the positive impact of Head Start beyond academics, underscoring that neglect prevention can be effective when economic stability is coupled with an environment that fosters safety and nurtures development.

It is important to note that the studies reviewed did not examine the differential impact of these policies based on factors such as gender, class, or race. Paid family leave has been shown to have positive effects on maternal and child health outcomes, specifically for women of color and low-income families. This study builds on that research to examine how caregiver race and gender influence the effect of paid family leave on infant neglect.

Paid Family Leave

Since the first state-level paid family leave program's implementation in 2004, the impact of such policies on maternal and infant health and labor market outcomes has been investigated. Paid family leave is associated with several positive outcomes, including improved birth and neonatal outcomes, higher rates of infant vaccination, reduced infant hospitalizations, increased initiation and duration of breastfeeding, and better maternal mental health. Moreover, paid family leave policies promote maternal leave-taking and labor market attachment. Mounting evidence suggests that access to paid family leave also plays a crucial role in improving outcomes for disadvantaged families who otherwise would not have access to paid leave without a state mandate.

Child Outcomes

Paid family leave has positively impacted various aspects of child health, such as reduced delayed infant immunizations, particularly among poorer households (Roy Choudhury & Polachek, 2021). Furthermore, the implementation of paid family leave is linked to an increased frequency of parents reading to infants, particularly in low-income households (Bullinger, 2019). In addition, paid family leave has been found to contribute to a decrease in infant hospitalizations for respiratory syncytial virus (RSV). This effect was more pronounced in rural areas compared to urban areas. Additionally, a greater impact was seen for infants covered by Medicaid; however, this finding was not statistically significant (Hutcheon et al., 2022). The positive benefits of paid family leave extend beyond infancy and are also evident among school-aged children. These benefits include a lower risk of being overweight, having ADHD, or experiencing hearing or communication problems. These results are particularly prominent among families with lower socioeconomic status and mothers with lower educational attainment (Lichtman-Sadot & Bell, 2017).

Breastfeeding Outcomes

Paid family leave has been shown to impact breastfeeding duration positively. This effect is especially significant among families that have experienced an interruption in phone service, mothers with lower educational attainment, and impoverished families. This study found that the implementation of paid family leave also led to higher rates of breastfeeding initiation among Black and Hispanic mothers (Pac et al., 2019). Furthermore, a study conducted by Dennison et al. in 2022 found a notable increase in breastfeeding duration of four to eight weeks, specifically among Black women.

Maternal Mental Health Outcomes

Paid family leave has been proven to positively affect the mental health of mothers, particularly those with lower incomes (Bullinger, 2019). Additional evidence indicates a reduction in symptoms of psychological distress among single and young mothers (Doran et al., 2020; Irish et al., 2021). It is important to note that compared to white middle-income parents, however, Black and Hispanic parents experienced an increase in psychological distress following paid family leave implementation (Irish et al., 2021).

Labor Market and Wage Outcomes

Following the implementation of paid family leave, there was a 15% increase in the likelihood of women using family leave, with the largest increases observed among Black and Hispanic women (Dennison et al., 2022; Rossin-Slater et al., 2013). Similar effects were seen among mothers with lower educational attainment and unmarried mothers (Rossin-Slater et al., 2013). There are conflicting outcomes regarding labor market participation. For example, one study found that California's paid family leave seems to increase the likelihood of low-income women working one year after giving birth (Kang et al., 2021). However, another study examining the labor markets in California and New Jersey indicates that improvements in maternal labor market participation were experienced by non-Hispanic women with higher educational attainment and advanced degrees with no significant effect on women with low educational attainment (Jones & Wilcher, 2020).

Significantly, paid family leave is associated with a decreased risk of poverty, particularly among single mothers and those with a high school degree or less. It also contributes to increased household income for married mothers and those with lower educational attainment. Additionally, paid family leave has been found to reduce food insecurity among low-income

households, families with more than one child, and parents under 30 years of age (Lenhart et al., 2021; Stanczyk, 2019).

Intersectionality and Reproductive Justice

Intersectionality and reproductive justice offer a helpful framework for analyzing the connection between neglect, gender, class, and race. Black feminist scholars have developed contexts for understanding multiple forms of oppression (Roberts, 2014). For instance, intersectionality (Crenshaw, 1989) and the matrix of domination (Collins, 2000) reject the single-axis concept of discrimination and instead examine the impact of complex oppressive power structures such as racism, classism, sexism, heterosexism, and ableism. Similarly, reproductive justice was conceived by women of color to center racism, classism, and other oppressions within the white fight for reproductive rights (Luna & Luker, 2013; Ross, 2006). Reproductive justice upholds three core rights: 1) the right to not have a child, 2) the right to have a child, and 3) the right to parent children in safe and healthy environments. Creating a framework that seeks racial, gender, economic, and environmental justice, reproductive justice asserts that people need "access to specific, community-based resources including high-quality health care, housing and education, a living wage, a healthy environment, and a safety net for times when these resources fail" (Ross & Solinger, 2017, p. 9).

The United States severely lags behind other similarly resourced countries regarding social infrastructure and family support policies and is the only OECD country without a federal paid family leave entitlement. Without policy interventions, many low-income families, single mother-headed households, and families of color lack the resources to raise their children in safe and healthy environments. It is essential to acknowledge the ways gender, class, and race intersect in discussions of neglect. An intersectional reproductive justice framework illuminates

how race, class, and gender biases may influence the child welfare system (Ross & Solinger, 2017). This framework makes it possible to examine prevention strategies, identify knowledge gaps, and deduce implications for social work policy, practice, and research.

Current Study

Paid family leave policies provide caregivers valuable time off work to care for their infants, easing potential additional stress regarding loss of wages. These policies have positively affected child and parental health, household financial stability, and parental employment outcomes. These benefits may potentially lead to a decreased risk of child neglect. Recent research has highlighted the effectiveness of paid family leave policies in reducing child maltreatment during early childhood (Klevens et al., 2016; Tanis et al., 2024). However, no studies have specifically examined neglect or explored the impact of caregiver demographics. Considering neglect is the most frequently reported type of child maltreatment, this study utilizes state administrative data to investigate whether caregiver sex and race play a role in the relationship between paid family leave and infant neglect. Specifically, this study aims to answer the following question: *To what extent do caregiver race and gender influence the incidence of infant neglect in states with a paid family leave policy compared to states without a paid family leave policy?*

Method

Data and sample

This study utilized national administrative child welfare data from the National Data Archive for Child Abuse and Neglect (NDACAN) at Cornell University. In collaboration with NDACAN statisticians, a custom dataset was created for this study using the National Child Abuse and Neglect Data System (NCANDS) Child File. To analyze caregiver characteristics,

only substantiated cases of neglect were selected, as NCANDS only collects perpetrator data for substantiated reports. As a result, the dataset consisted of administrative data from 2003 to 2019 for all substantiated neglect cases for children under two. For this study, the sample was further narrowed to infants under one year of age and caregivers 18 and older, for a total analytic sample of 804,959. A longitudinal panel dataset was then created using the sample from the custom dataset. Seven states (Colorado, Kansas, Louisiana, Montana, North Dakota, Oregon, and Puerto Rico) were excluded from the panel dataset due to missing data, which will be discussed in more detail later.

Measures

Outcome

The outcome variable was cases of substantiated neglect involving infants under one year old. This variable was determined based on two NCANDS Child File data variables: report disposition and maltreatment type. The value selected from the NCANDS Child File maltreatment type was: 'neglect or deprivation of necessities.' This study did not include reports of medical neglect. To calculate the substantiated infant neglect rate, the number of substantiated neglect cases was divided by the total number of infants in the same age group and state and then multiplied by 1,000.

Paid Family Leave

The independent variable in this study is access to state-level paid family leave. This variable has two values: 0 represents no access to paid family leave, and 1 represents access to paid family leave for each analysis year. During the study period, several states implemented paid family leave policies: CA in 2004, NJ in 2009, NY in 2018, and RI in 2014. These states

were coded as having access to paid family leave starting from the year their respective programs were implemented.

Moderating Parental Demographics

This study utilized race and sex as individual-level characteristics as moderating variables. These variables were derived from the NCANDS Child File using the following variables: *perpetrator relationship*, *perpetrator as caregiver*, *perpetrator as parent*, *perpetrator sex*, and *perpetrator race*. According to NCANDS, a caregiver is defined as an individual responsible for the care and supervision of a child. As such, the original dataset was filtered based on the *perpetrator as caregiver* variable. Only cases with a value of 1 (indicating "yes") were included. This variable denotes the person who either caused or knowingly allowed child maltreatment to occur and was responsible for the victim's care and supervision when the maltreatment occurred. This study focuses on caregivers who may have been eligible for paid family leave, such as parents, foster parents, and legal guardians. Therefore, the following relationships were included using the *caregiver relationship* variable: parent (biological, step, and adoptive parents), relative foster parent, nonrelative foster parent, unmarried partner of parent, legal guardian, and foster parent-relationship unknown or unspecified (used when the relative versus nonrelative status of a foster parent is unknown).

The caregiver sex variable is binary, with 1 indicating a female caregiver and 2 indicating a male caregiver. Additionally, variables were created to represent the percentage of female and male perpetrators for substantiated infant neglect in the panel dataset. To achieve this, the crosstabs feature was used to tabulate the frequency of female and male perpetration of infant neglect for each state during each year of the study. The resulting number was then divided by the total incidence of infant neglect for each state and year, multiplied by 100 to determine the

percentage. This approach enabled a direct examination of the moderation effect of caregiver gender on the relationship between paid family leave and infant neglect, as well as a direct comparison of the effects for female and male caregivers who are perpetrators of neglect.

The caregiver race variable is binary, with 1 indicating a white caregiver and 2 indicating a person of color (POC) caregiver. The NCANDS Child File has much more expansive race and ethnicity categories; however, due to the low sample size, all non-white racial categories were collapsed into one variable. This binary variable was constructed much like the caregiver sex variable described above. Using the crosstabs feature of SPSS, the frequency of white and POC perpetration of infant neglect was tabulated for each year and state. The resulting number was divided by the total incidence of substantiated infant neglect for each state and year and multiplied by 100 to determine a percentage. This enabled a direct examination of the moderation effect of caregiver race on the relationship between paid family leave and infant neglect, as well as a direct comparison of the effects for white and POC caregivers who are perpetrators of neglect.

State Level Covariates

Four state-level variables were included as covariates based on economic, educational, and family factors associated with paid family leave research and child maltreatment outcomes: educational attainment, poverty, labor force participation, and single parenthood. Educational attainment is defined as the percentage of the state population between the ages of 25 and 64 who are not high school graduates. Poverty data is the percentage of children under five living in families with incomes below the poverty line. Labor force participation data is defined as children under six whose resident parent is not in the civilian labor force. The single-parent variable is the percentage of children under age 18 who live with a single parent in a family or

subfamily. Within this definition, single parents may include cohabiting couples and do not include children living with married stepparents. Data for all four covariates was obtained from the Annie E. Casey's Kids Count Data Center. Educational attainment, poverty, and single-parent data are sourced from a Population Reference Bureau analysis of the U.S. Census Bureau, Census Supplementary Survey, and American Community Survey. Labor force participation data is sourced from a Population Reference Bureau analysis of data from the U.S. Census Bureau, American Community Survey.

Analysis

Prior to testing my hypothesis, I addressed the issue of missing data. The NCANDS Child File, the data source for this study, has varying levels of data collection and submission across different states, resulting in a significant amount of missing data in the primary data set. To overcome this, I utilized the aggregated dataset from NDACAN and created a longitudinal panel dataset specifically for this study. I then assessed the extent of missingness within this panel dataset using R 4.3.2 (R Core Team, 2023). There was approximately 14% missing data across key study variables.

To address the missing values, I first excluded any states with missing data for all years of the study. These states included Colorado, Kansas, Louisiana, North Dakota, Oregon, and Puerto Rico. Montana was also excluded due to insufficient data for imputation. I utilized multivariate imputation by chained equations (R package mice) (van Buuren & Groothuis-Oudshoorn, 2011) to handle the missingness of the following variables: neglect rate, percent perpetrator was female, percent perpetrator was male, percent perpetrator was white, and percent perpetrator was a person of color. Five imputations were computed, combined, and used to test the study hypotheses.

After addressing the missingness issue, I conducted descriptive analyses. I conducted independent sample t-tests to compare cases in states with paid family leave to those without and examined means, standard deviations, and correlations among the study variables. The data's nested structure and the distribution pattern's non-normality led to the use of generalized linear mixed models (GLMM) to estimate the effect of paid family leave policies on infant neglect. The use of GLMMs allowed for a complex modeling structure in which I could incorporate fixed effects (access to paid family leave) and random effects (parental characteristics) while also being well-suited to incorporate imputed data. Model 1 examines the effect of paid family leave access on substantiated infant neglect rates with year as a covariate. Model 2 adds four state-level control variables (poverty, educational attainment, no labor force participation, and single parenthood) to identify covariates that may significantly impact the relationship between paid family leave access and infant neglect. Model 3 examined the effect of paid family leave access and caregiver sex on infant neglect. Paid family leave access, the percentage of female perpetrators, the interaction term between these variables, and the year were included. Model 4 examined paid family leave access, the percentage of male perpetrators, the interaction term between these two variables, and the year in the model. Models 5 and 6 assessed the effect of paid family leave access and caregiver race on infant neglect. Model 5 included paid family leave access, the percentage of white perpetrators, the interaction term between these two variables, and the year. Finally, in Model 6, paid family leave access, the percentage of perpetrators who are people of color, the interaction term between these two variables, and the year were included.

Results

Descriptive Results

The results of the descriptive analysis for the original NDACAN dataset are presented in Table 4.1. Regarding the demographic background of the caregivers, the mean age was 27.30 years (SD = 6.73). Among the caregivers, 51.2% were White, 22.4% were Black, and 21.9% were Hispanic. The remaining caregivers in the sample identified as American Indian/Native Alaskan (1.7%), Asian (1.0%), Native Hawaiian/other Pacific Islander (0.2%), or more than one race (1.7%). The majority of the sample were women (67.7%), and 98.5% were parents of the identified child, specifically biological parents (99.5%).

Table 4.1

Descriptive statistics for the full sample (n = 804,959)

Variable	n (%)
Age	
18-19	71,907 (7.8)
20 - 29	558,971 (59.1)
30 - 39	241,800 (25.5)
40 - 49	41,254 (4.3)
> 50	6,915 (0.5)
Race/Ethnicity	
(1) White	447,876 (51.2)
(2) Black or African American	195,594 (22.4)
(3) American Indian or Native Alaskan	14,432 (1.7)
(4) Asian	8.589 (1.0)
(5) Native Hawaiian or other Pacific Islander	1,439 (0.2)
(6) More than one race	15,296 (1.7)
(7) Hispanic or Latino	191,279 (21.9)
Sex	
(1) Male	295,359 (32.1)
(2) Female	623,496 (67.7)
Parent Type	
(0) Not Collected or Not Applicable	10 (0.0)
(1) Biological Parent	843,452 (99.5)
(2) Step-Parent	3,469 (0.4)
(3) Adoptive Parent	435 (0.1)
Relationship	
(1) Parent	906,607 (98.5)
(3) Relative Foster Parent	442 (0.0)
(4) Nonrelative Foster Parent	743 (0.1)

Table 4.1 (cont'd)

(7) Unmarried Partner of Parent	12,427 (1.3)
(8) Legal Guardian	320 (0.0)
(33) Foster Parent-Relationship Unknown	308 (0.0)
Paid Family Leave Access	
(0) No	737,939 (80.1)
(1) Yes	182,908 (19.9)

To compare states with and without access to paid family leave, I conducted independent sample t-tests (Table 4.2). The variables were divided into two groups: 1) states with access to paid family leave (coded as 1) and 2) states without access to paid family leave (coded as 0). I then compared the mean scores of these two groups for the study and control variables.

There was no significant difference in the mean infant neglect rate between states with access to paid family leave and those without (t = -1.07 p = 0.145, 95% CI [-3.43, 1.04]). As for the covariates, the means did not differ significantly between the groups for single parenthood (t = -0.42, p = .34, 95%CI [-1.54, 1.01]) and no labor force participation (t = 1.36, p = 0.09, 95% CI [-0.18, 0.92]). However, there were significant differences between the groups for the variables of educational attainment (t = -2.57, p = 0.006, 95% CI [-2.59, -0.36]) and poverty (t = 6.34, p < .001, 95% CI [2.54, 4.86]). Furthermore, there were significant differences for all the test variables: Female Perpetrator (t = 2.85, p = 0.03, 95% CI [1.40, 7.95]), Male Perpetrator (t = -3.29, p < 0.001, 95% CI [-9.00, -2.20]), White Perpetrator (t = 9.31, p < 0.001, 95% CI [14.36, 22.18]), and POC Perpetrator (t = -11.01, p < .001, 95% CI [-21.74, -15.08]). These values come from the pooled estimates of the imputations.

Table 4.2

Independent samples t-test comparing states with and without paid family leave

	Paid Family Leave		No Paid Family Leave					
	M	SD	M	SD	t-value	df	p-value	95% CI
Poverty	17.88	3.69	21.58	7.98	6.34	76.31	< .001	2.54, 4.86

Table 4.2 (cont'd)

EduAttain	11.82	4.16	10.36	3.45	-2.57	59.38	.006	-2.59, -0.32
NoLFPR	8.39	1.80	8.76	2.73	1.36	60.41	0.09	-0.18, 0.92
SinglePrt	33.62	4.24	33.35	6.54	-0.42	62.42	0.34	-1.54, 1.01
NegRt	17.10	7.51	15.90	12.98	-1.07	80.82	.145	-3.43, 1.04
FemaleRt	65.61	11.68	70.28	12.18	2.85	63.21	0.03	1.40, 7.95
MaleRt	32.51	12.13	26.92	12.67	-3.29	63.24	< .001	-9.00, -2.20
WhiteRt	38.68	13.51	56.96	19.56	9.31	72.69	< .001	14.36, 22.18
POCRt	55.17	11.32	36.76	18.26	-11.01	77.54	< .001	-21.74, -15.08

Note: Panel data sample $N = 1040$
Covariate definitions: Family Poverty = state percentage of children under five living in families with incomes below the FPL; EduAttain = state percentage of people the ages of 25 and 64 who are not high school graduates; NoLFPR = state percentage of children under six whose resident parent is not in the civilian labor force; and SinglePrt = state percentage of children under age 18 who live with a single parent in a family or subfamily. Moderator definitions: NegRt = state rate of substantiated infant neglect; FemaleRt = state percentage of perpetrators that are female caregivers; MaleRt = state percentage of perpetrators that are male caregivers; WhiteRt = state percentage of perpetrators that are White caregivers; and POCRt = state percentage of perpetrators that are non-White caregivers.

Multivariate Results

Model 1: Association between Paid Family Leave Access and Infant Neglect Rates

A generalized linear mixed model (GLMM) analysis was conducted to evaluate the impact of state-level paid family leave access on substantiated infant neglect rates while controlling for the effect of time (year). The coefficient for paid family leave access (PFLAccess) was estimated to be –0.241 (SE = 0.0681, z = -3.53, p <0.001). This negative coefficient suggests that states with access to paid family leave exhibit, on average, a lower rate of infant neglect compared to those without such policies. Concurrently, the inclusion of the time variable (year) revealed a significant positive association with infant neglect (estimate = 0.0246, SE = 0.00188, z = 18.4, p <0.001), indicating an overall increase in infant neglect rates over time across all states, irrespective of paid family leave policy status. Figure 4.1 illustrates the plotted predicted proportions of Model 1, showing that substantiated infant neglect increases over time for all states, regardless of paid family leave policy status. Detailed coefficients are provided in

Table 4.3. The predicted proportion of infant neglect in states with access to paid family leave is 20% lower than in states without such access.

Table 4.3

Model 1: Paid family leave access and infant neglect rates

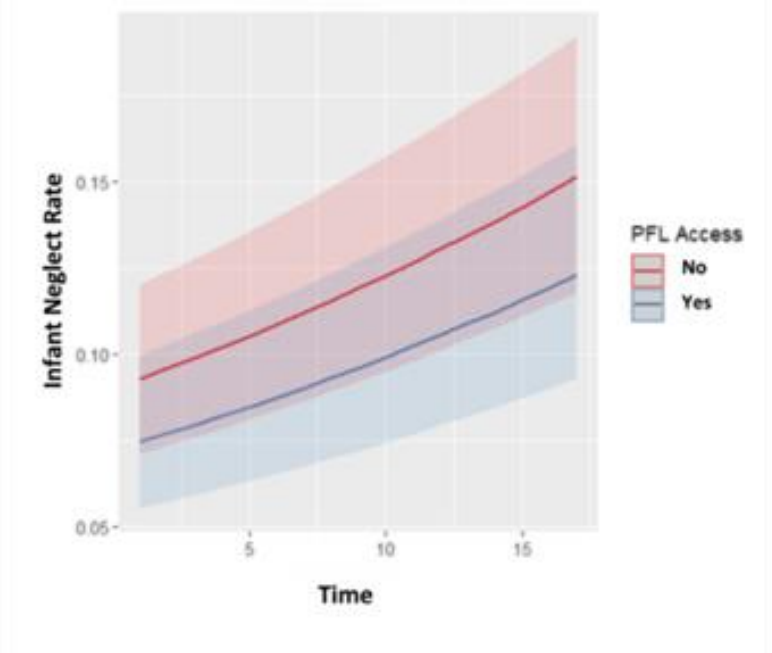
	Estimate	Standard Error	*z*-value	*p*-value	OR
Intercept	-2.31	0.148	-15.7	< 0.001	0.099

Table 4.3 (cont'd)

PFLAccess	-0.241	0.0681	-3.53	< 0.001	0.786
Year	0.0346	0.00188	18.4	< 0.001	1.03

Figure 4.1

Predicted proportion plot for model 1



Model 2: Association between State-Level Covariates and Infant Neglect Rates

A subsequent GLMM (Model 2) explored the relationship between various state-level covariates and substantiated infant neglect rates. The analysis revealed a significant positive association between state rates of family poverty (poverty) and adults without a high school

diploma (EduAttain), and infant neglect, with estimated coefficients of 0.0266 (SE = 0.004, z = 6.21, p < 0.001) and 0.0425 (SE = 0.007, z = 6.15, p < 0.001) respectively. Conversely, higher rates of non-participation in the labor force among parents with children under six (NoLFPR) were associated with a decrease in infant neglect, with an estimated coefficient of –0.0328 (SE = 0.009, z = -3.59, p < 0.001). The relationship between state rates of children living with a single parent (SinglePrt) and infant neglect was not statistically significant (p = 0.317). Detailed coefficients are provided in Table 4.4.

Table 4.4

Model 2: State-level covariates and infant neglect rates

	Estimate	Standard Error	*z*-value	*p*-value	OR
Intercept	-2.56	0.136	-18.8	< 0.001	0.078
Poverty	0.0266	0.00428	6.21	< 0.001	1.03
EduAttain	0.0425	0.00691	6.15	< 0.001	1.04
NoLFPR	-0.0328	0.00915	-3.59	< 0.001	0.968
SinglePrt	-0.00357	0.00356	-1	0.317	0.996
Year	0.0327	0.00363	9.01	< 0.001	1.03

Note: Covariate definitions: Family Poverty = state percentage of children under five living in families with incomes below the FPL; EduAttain = state percentage of people the ages of 25 and 64 who are not high school graduates; NoLFPR = state percentage of children under six whose resident parent is not in the civilian labor force; and SinglePrt = state percentage of children under age 18 who live with a single parent in a family or subfamily.

Model 3: Interaction between Female Caregivers as Perpetrators and Paid Family Leave Access

Model 3 investigated the interaction between the proportion of female caregivers as perpetrators (FemaleRt) and access to paid family leave on infant neglect rates. While the primary effect of paid family leave access was not significant (estimate = 0.376, SE = 0.256, z = 1.47, p = 0.143), a significant interaction was observed between female caregivers as perpetrators and paid family leave access (FemaleRt:PFLAccess), with a coefficient of -0.008 (SE = 0.003, z = -2.46, p = 0.013). This interaction suggests that the relationship between paid

family leave access varies based on the proportion of female caregivers as perpetrators. Detailed coefficients are provided in Table 4.5.

Table 4.5

Model 3: Interaction between female caregivers as perpetrators and paid family leave access

	Estimate	Standard Error	*z*-value	*p*-value	OR
Intercept	-3.08	0.169	-18.2	< 0.001	0.046
Year	0.0371	0.00187	19.8	< 0.001	1.04

Table 4.5 (cont'd)

FemaleRt	0.0104	0.00103	10	< 0.001	1.01
PFLAccess	0.376	0.256	1.47	0.143	1.46
FemaleRt:PFLAccess	-0.00849	0.00345	-2.46	0.013	0.992

Model 4: Interaction between Male Caregivers as Perpetrators and Paid Family Leave Access

Model 4 explored the interaction between the proportion of male caregivers as perpetrators (MaleRt) and access to paid family leave on infant neglect rates. The analysis revealed a significant negative association with infant neglect and a significant main effect of paid family leave access, with an estimated coefficient of –0.436 (SE = 0.108, z = -4.03, p <0.001). Additionally, a significant interaction was observed between the proportion of male caregivers as perpetrators and paid family leave access (MaleRt:PFLAccess), with a coefficient of 0.008 (SE = 0.003, z = 2.38, p = 0.017), indicating that the relationship between paid family leave access and infant neglect varies based on the proportion of perpetrators that are male caregivers. Detailed coefficients are provided in Table 6.

Table 4.6

Model 4: Interaction between male caregivers as perpetrators and paid family leave access

	Estimate	Standard Error	*z*-value	*p-value*	OR
Intercept	-2.11	0.152	-13.8	< 0.001	0.122
Year	0.0394	0.00193	20.4	< 0.001	1.04
MaleRt	-0.00997	0.00106	-9.41	< 0.001	0.99

Table 4.6 (cont'd)

PFLAccess	-0.436	0.108	-4.03	< 0.001	0.647
MaleRt:PFLAccess	0.00783	0.00329	2.38	0.017	1.01

Model 5: Interaction between White Caregivers as Perpetrators and Paid Family Leave Access

Model 5 explored the interactions between the proportion of white caregivers as perpetrators and paid family leave access. The analysis revealed a significant negative association with infant neglect, with an estimated coefficient of –0.006 (SE = 0.001, z = -4.94, p < 0.001), suggesting that states with higher proportions of white caregivers as perpetrators tend to have lower rates of infant neglect. The main effect of access to paid family leave was not statistically significant (estimate = 0.3, SE = 0.26, z = 1.15, p = 0.248), indicating that the presence of paid family leave policies alone may not be associated with the differences in rates of infant neglect. However, a significant interaction between the proportion of white caregivers as perpetrators and paid family leave access (WhiteRt:PFLAccess), with a coefficient of –0.0121 (SE = 0.005, z = -2.19, p = 0.028), suggests that the relationship between paid family leave access and infant neglect varies depending on the proportion of perpetrators that are white caregivers. Detailed coefficients are provided in Table 4.7.

Table 4.7

Model 5: Interaction between white caregivers as perpetrators and paid family leave access

	Estimate	Standard Error	*z*-value	*p*-value	OR
Intercept	-1.96	0.164	-12	< 0.001	0.141
Year	0.0344	0.00187	18.4	< 0.001	1.03
WhiteRt	-0.00642	0.0013	-4.94	< 0.001	0.994
PFLAccess	0.3	0.26	1.15	0.248	1.35
WhiteRt:PFLAccess	-0.0121	0.00549	-2.19	0.028	0.988

Model 6: Interaction between non-White Caregivers as Perpetrators and Paid Family Leave Access

Model 6 examined interactions between the proportion of non-White caregivers as perpetrators (POCRt) and paid family leave access. The analysis revealed a significant positive association with infant neglect, with an estimated coefficient of 0.009 (SE = 0.002, z = 5.79, p < 0.001), indicating that states with higher proportions of non-white caregivers as perpetrators may experience elevated rates of infant neglect. However, the main effect of access to paid family leave was not statistically significant (estimate = -0.252, SE = 0.276, z = -0.913, p = 0.361), suggesting that the presence of paid family policies alone may not be associated with the differences in rates of infant neglect. The interaction between the proportion of non-White caregivers as perpetrators and paid family leave access (POCRt:PFLAccess) was not statistically significant (estimate = 5.242e-05, SE = 0.005, z = 0.01, p = 0.992), indicating that the relationship between paid family leave access and infant neglect does not vary significantly based on the proportion of non-white caregivers as perpetrators in a state. Detailed coefficients are provided in Table 4.8.

Table 4.8

Model 6: Interaction between non-white caregivers as perpetrators and paid family leave access

	Estimate	Standard Error	*z*-value	*p*-value	OR
Intercept	-2.65	0.158	-16.8	< 0.001	0.071
Year	0.0332	0.00188	17.7	< 0.001	1.03
POCRt	0.0092	0.00159	5.78	< 0.001	1.01
PFLAccess	-0.252	0.276	-0.913	0.361	0.777
POCRt:PFLAccess	5.24E-05	0.00545	0.00961	0.992	1

Predicted Probabilities

Predicted probabilities were generated and plotted from Models 3, 4, and 5 to provide additional context for this study's findings. Examining the change in probabilities between states with and without paid family leave access aids in interpreting the results detailed earlier. Figure 4.2 displays the predicted probability plots for the three significant interactions: 1) proportion of female caregivers as perpetrators and paid family leave access (FemaleRt:PFLAccess), 2) proportion of male caregivers as perpetrators and paid family leave access (MaleRt:PFLAccess), and 3) proportion of white caregivers as perpetrators and paid family leave access (WhiteRt:PFLAccess). On the x-axis is the state proportion of each perpetrator characteristic, while the y-axis represents substantiated infant neglect rates. In the plots, the red line signifies states without paid family leave access, while the blue line represents states with paid family leave access. These visualizations highlight that paid family leave access tends to have the most significant impact on reducing infant neglect rates in states with higher proportions of female and white caregivers as perpetrators and lower proportions of male caregivers as perpetrators.

The female caregiver plot reveals that while substantiated infant neglect increases over time for all states, the slope for states with paid family leave access is less steep than for states without paid family leave access and when the proportion of female caregivers as perpetrators is 60%, the probability of infant neglect is .11 in states lacking paid family leave access, compared to .09 in states with paid family leave access, reflecting a 22% reduction in infant neglect rates.

Similarly, the male caregiver plot illustrates that substantiated infant neglect rates are decreasing over time for all states, with the effects of paid family leave access more pronounced when the proportion of male caregivers as perpetrators is below 50%. For instance, when the proportion of male caregivers as perpetrators is 40%, the probability of infant neglect is .10 in

states without paid family access, and .09 in states with paid family leave access, representing an 11% reduction in infant neglect.

Finally, the white caregiver plot demonstrates more notable effects for states with higher proportions of white caregivers as perpetrators. When the proportion of white caregivers as perpetrators is 50%, the probability of infant neglect is .12 in states with no access to paid family leave, compared to .09 in states with access to paid family leave, reflecting a 33% reduction in substantiated infant neglect rates.

Figure 4.2

Predicted proportion plots of models 3-5

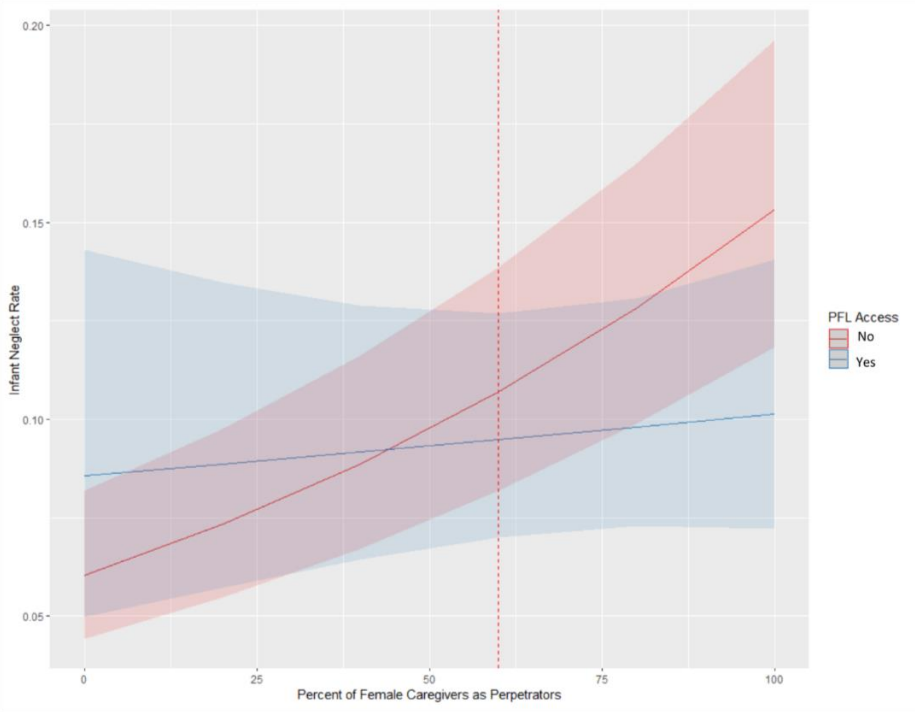
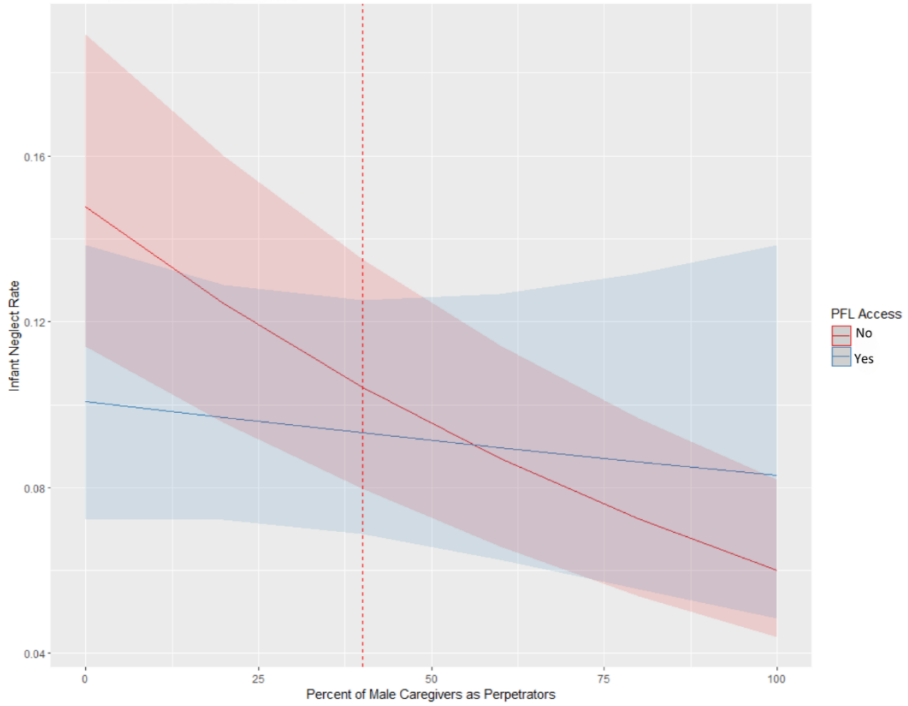
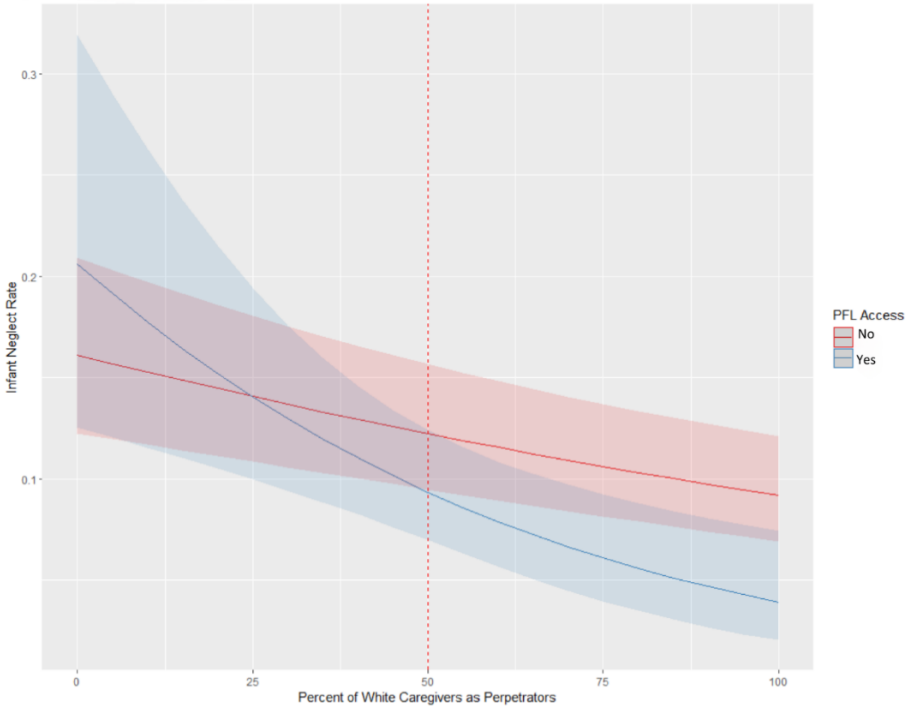


Figure 4.2 (cont'd)





Discussion

Impact of State-Level Paid Family Leave Access on Infant Neglect

This study examined the impact of access to state-level paid family leave policies on infant neglect rates. The generalized linear mixed model (GLMM) analyses revealed a significant negative association between access to paid family leave and substantiated infant neglect rates, even after accounting for the effect of time. States with access to paid family leave policies exhibited a 20% lower predicted probability of infant neglect compared to states without such policies. The observed decrease in infant neglect rates associated with state-level paid family leave highlights the potential protective effect of these policies in promoting child welfare. This finding is consistent with existing literature suggesting that policies supporting household economic stability may play a crucial role in reducing the incidence of child maltreatment (Berger et al., 2017; Biehl & Hill, 2017; Kovski et al., 2017; Maguire-Jack et al., 2019; Puls et al., 2021; Rostad et al., 2020; Yang et al., 2019).

Influence of State-Level Covariates on Infant Neglect Rates

In addition to paid family leave access, the analyses examined the influence of various state-level covariates on substantiated infant neglect rates. Consistent with prior research, higher rates of family poverty were significantly associated with increased infant neglect rates (Marcal et al., 2023; Sedlak et al., 2010). Additionally, higher rates of adults without a high school diploma were associated with increased infant neglect rates. Conversely, higher rates of non-participation in the labor force among parents with young children were associated with a decrease in infant neglect.

These findings emphasize the complex relationship between socioeconomic factors and neglect. The labor force covariate represents the state rate of children under six whose resident

parents are not in the civilian labor force. This variable could encompass a variety of family situations, such as families that receive child support payments from a non-resident parent or other forms of financial support from the social safety net, such as social security income for parents unable to work due to disability. Recent studies have shown that the social safety net effectively reduces child poverty (Thomson et al., 2022), and access to such resources could explain why this covariate is associated with a decrease in infant neglect when family poverty and educational attainment are associated with an increase. This reiterates that efforts to address infant neglect must consider the broad social and economic context in which families operate, including access to resources and educational opportunities. Policies aimed at reducing poverty and improving educational attainment may contribute to lower rates of infant neglect by addressing these underlying risk factors.

Interaction Effects and Differential Impacts

Furthermore, these analyses explored the interaction effects between the demographic characteristics of perpetrators and access to paid family leave. Significant interactions were found between the proportion of female caregivers, male caregivers, and white caregivers, and paid family leave access. These interactions suggest that the relationship between paid family leave access and infant neglect varies based on the gender composition and racial demographics of caregivers. Interestingly, while states with higher proportions of white caregivers tended to have lower rates of infant neglect, the presence of paid family leave policies further reduced these rates. However, similar effects were not observed for states with higher proportions of non-white caregivers, raising concerns about equitable policy access and effectiveness.

These findings suggest that variation in economic pressures and systemic barriers experienced by families with different racial and gender makeup may be linked to these

disparities. According to the Bureau of Labor Statistics, Hispanic workers have lower rates of paid-leave access and utilization compared to White non-Hispanic workers (Bartel et al., 2019). Additionally, a recent policy brief reported that awareness of eligibility for paid family leave was lower among Black and Hispanic mothers in California, with only 64% of Black mothers and 67.1% of Hispanic mothers aware of their eligibility, compared to 74.9% of White mothers. The same brief also indicated that wage replacement of at least 50% during leave was received by only 62.5% of Black mothers, compared to 71.7% of White mothers (Holod et al., 2020).

These issues are compounded by broader racial economic disparities. For every dollar of household income earned by white families, Black families in New Jersey make $0.59, $0.62 in California and New York, and $0.69 in Rhode Island (Kent, 2020). Nationally, poverty rates are significantly higher for non-white Americans, with an overall poverty rate of 11.5%, compared to 8.6% for non-Hispanic whites, 17.1% for Blacks, 25% for American Indian/Alaskan Natives, and 16.9% for Hispanics (Dalaker, 2024). In California, Latinos are disproportionately affected by poverty, comprising 50.7% of the poor population but only 39.7% of the total population (Bohn et al., 2023).

These disparities highlight the significant economic barriers faced by non-white caregivers, which may contribute to reduced access to and benefit from paid family leave policies. The lack of statistical significance for the interaction effect observed for non-white caregivers as perpetrators indicate that paid family leave policies, as currently designed, may not be equally effective in reducing infant neglect for these groups. It is important to consider this finding within the context of disparities in policy awareness, wage replacement, and broader economic conditions to refrain from blaming this sub-population of caregivers for the non-effect and ensure equitable distribution of the benefits experienced through paid family leave access.

These findings are also important to consider in the ongoing debate regarding risk versus bias in racial disparities in the child welfare system. Research suggests that families from historically minoritized racial and ethnic backgrounds are overrepresented in the child welfare system due to increased risk, often due to systemic factors such as poverty, discrimination, and unequal access to resources (Drake et al., 2020). On the other hand, there is growing recognition that implicit biases and structural inequities play a role in decision-making processes within the child welfare system, leading to disparities in how families are assessed, monitored, and supported (Detlaff et al., 2022). In the context of this research, these findings highlight the protective effects of paid family leave for certain caregiver demographics and raise questions about whether these policies are equally accessible and beneficial for all families, regardless of race or ethnicity. If certain racial or ethnic groups are less likely to have access to paid family leave or face barriers in utilizing these policies, it could exacerbate existing disparities in child welfare outcomes.

The differential impact of paid family leave on infant neglect across racial demographics highlights the need for a more nuanced approach to policy implementation. It is essential to consider how these policies intersect with broader issues of racial equity and social justice. Addressing disparities in policy access and ensuring that all families have equitable opportunities to benefit from supportive measures like paid family leave is crucial for advancing racial equity in child welfare and promoting positive outcomes for all children and families.

Implications

This study highlights the interaction between caregiver demographics (such as race, class, and gender) with paid family leave policies, demonstrating their influence on rates of infant neglect. These findings have several implications for policy and practice. Firstly, they emphasize

the importance of paid family leave policies as a potential mechanism for preventing infant neglect and reinforce the recommendations that policymakers should consider expanding access to paid family leave as part of comprehensive strategies to support families and promote child welfare (Fortson et al., 2016; Bullinger et al., 2023).

For paid family leave to be an effective prevention strategy, it must be accessible to the most vulnerable families. This study emphasizes that state family poverty rates are associated with increased rates of substantiated infant neglect. However, in 2021, only 6% of workers in the lowest-wage jobs had access to such policies (Carlson et al., 2023). Research has shown that wage replacement formulas for state-paid family leave programs are inadequate for some families (Schumacher, 2022; Setty et al., 2016; Winston et al., 2019). Therefore, newer programs have implemented progressive wage replacement strategies that offer higher wage replacement to lower-wage workers (Shabo, 2024). Targeted interventions like this are necessary to ensure that marginalized families can benefit from paid family leave policies.

This research was conducted from a reproductive justice perspective, acknowledging that all families have the right to raise their children in safe and supportive environments (Ross & Solinger, 2017). Paid family leave policies are crucial for ensuring reproductive justice because they enable caregivers to take time off work to care for their children without increased financial hardship. The study's findings emphasize the connection between financial stability and a safe nurturing environment for children and policies' role in supporting caregivers' child-rearing capacities. However, it is essential to recognize that paid family leave policies are just one part of a broader system of comprehensive family support policies across the life course. In addition to paid family leave, families also need access to robust anti-poverty programs, affordable child care, affordable and quality healthcare, safe and affordable housing, and educational support.

Achieving reproductive justice requires examining structural inequities such as racism and sexism, which contribute to unequal access to resources and opportunities (Ross & Solinger, 2017). The findings of this study call attention to the impact of racial inequities on child and family outcomes. The results reveal that paid family leave policies may effectively mitigate neglect when utilized by female, male, and white caregivers. However, the nonsignificant findings for non-white caregivers suggest this demographic did not experience the same protective effect. This highlights the need to address the systemic inequities these caregivers face, including limited access to resources, economic disparities, and racial discrimination. Although we do not have information in this study about whether any of the caregivers utilized paid family leave, other studies have shown that Black and Hispanic workers, particularly women, are less likely to have access to paid family leave (Goodman et al., 2021). Equitably designed paid family leave policies can help reduce neglect rates and promote better outcomes for all families.

In 2019, two-thirds of mothers were either breadwinners or co-breadwinners for their families, and mothers in the bottom 20% of the income distribution are more than three times as likely to be the sole or primary earner for their family compared to those in the top 20% (Glynn, 2021). Furthermore, gender inequality among adults contributes to higher levels of child maltreatment (Ma et al., 2022). Paid family leave policies provide financial stability to these caregivers, challenge traditional gender roles, and promote the value of caregiving regardless of gender (Agerstrom et al., 2023; Tavits et al., 2023). The evidence from this study suggests that states with paid family leave and a higher percentage of mothers as perpetrators see a 22% reduction in infant neglect rates compared to states without paid family leave. Paid family leave decreases maternal stress and improves maternal health outcomes (Brito et al., 2022; Bullinger,

2019; Coombs et al., 2022; Doran et al., 2020; Lee et al., 2020), which may contribute to the findings of this study.

Paid family leave is vital to support family well-being at different levels: individual, family, and societal (Carlson et al., 2023). These findings are significant for policymakers and advocates in child welfare. By taking a socioecological and intersectional approach, it becomes evident that paid family leave is a valuable tool for preventing neglect within the broader context of child welfare policy. Understanding these findings can help tailor interventions and support services that consider the diverse backgrounds of caregivers, emphasizing the importance of inclusive and equitable policies.

Limitations and Future Directions

There are some limitations to consider. First, the issue of missing data was addressed using rigorous techniques such as multiple imputations to mitigate the impact on study outcomes. However, these outcomes should still be interpreted with caution. Additionally, it is worth noting that this study relies on substantiated neglect cases, which may not capture the full scope of neglect instances. Moreover, the analyses are limited by the need to collapse all non-white caregivers into one broad category of people of color. By being unable to disaggregate racial data, this study fails to capture the nuance in the unique experiences of different racial and ethnic groups. Finally, and importantly, there is no way of knowing if the families in this data set utilized paid family leave programs.

Several future directions of research can enhance our understanding of this subject. Future research should further explore the mechanisms underlying the observed interactions and investigate additional factors that may influence the effectiveness of paid family leave policies in preventing infant neglect. This can be done using a data source with consistent and reliable

reporting of caregiver demographics and characteristics, allowing data disaggregation to capture caregivers' experiences from diverse racial and ethnic backgrounds. Further, qualitative research could provide a deeper understanding of how paid family leave influences caregiver behavior, impacts infant neglect, and how policy interventions are perceived and utilized. Investigating how paid family leave intersects with other social determinants, such as inequality, racial disparities, and access to health care, is essential for informing policy development. Finally, longitudinal studies could provide insights into the long-term effects of paid family leave policies on child well-being.

Conclusion

This study provides robust evidence that state-level access to paid family leave policies is associated with a reduction in substantiated infant neglect rates. The findings suggest a nuanced relationship between caregiver characteristics, policy interventions, and neglect outcomes. Paid family leave plays a critical role in achieving equity and alleviating the burden of caregiving. However, it is essential to acknowledge the underlying systemic inequalities contributing to neglect rates. Given that female caregivers make up a large proportion of infant neglect perpetrators, the significant decrease in neglect rates among female caregivers underscores the importance of maternal support during the perinatal period. Similarly, the non-significant findings for the interaction involving non-white caregivers highlight the potential need for more equitable policy development. The findings of this research reiterate the importance of considering social policies as a tool to prevent child maltreatment and emphasize the need for targeted policy interventions that consider the diverse demographics and needs of caregivers. Through a comprehensive understanding of these dynamics, paid family leave and similar policies can be leveraged to create environments promoting child safety and well-being.

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CHAPTER 5: DISCUSSION AND IMPLICATIONS

Children in the United States are considered one of the most vulnerable populations. In the 1970s, the federal government established the child welfare system to improve their safety. Interactions with this system are common for American families, with research suggesting that 40% of U.S. children will have a child protective services report filed on their behalf before the age of 18 (Kim et al., 2017). The youngest children are particularly at risk, as more than a quarter of all maltreatment victims are in the age range of birth through two years old; the victimization rate is highest for children under the age of one at 25.3 per 1,000 children (USDHHS, 2023). Research has shown that poverty and economic hardship increase the likelihood of child maltreatment, especially neglect (Sedlak et al., 2010). Neglect makes up three-quarters of all confirmed maltreatment reports (USDHHS, 2023), yet interventions within the child welfare system have not historically addressed neglect-related factors. Poverty is a significant predictor of neglect (Proctor & Dubowitz, 2014; Sedlak et al., 2010). Families with young children often experience high rates of poverty, and income inadequacy is particularly common when a new child is born (Paschall & Bartlett, 2019; Stanczyk, 2020). In recent years, studies have provided compelling evidence that family-centered economic support policies and anti-poverty strategies should be a central focus of child maltreatment prevention (Briar-Lawson et al., 2023; Fortson et al., 2016; Maguire-Jack et al., 2021).

This dissertation offers a comprehensive examination of the effects of paid family leave on family well-being, with a particular focus on preventing child maltreatment. This research is presented in a three-paper format, consisting of three distinct manuscripts that each make a valuable contribution to the field of child maltreatment prevention. Despite their stand-alone nature, these studies are interconnected and provide an iterative analysis.

Key Findings

Chapter 2, a scoping review, explores the potential benefits of paid family leave policies in reducing infant maltreatment through various ecological mechanisms. This study highlights the positive impact of state-level paid family leave policies on child outcomes, parental outcomes, family outcomes, and labor force outcomes. By addressing the socioecological context of child maltreatment prevention, this chapter emphasizes the significance of early-life policy interventions. As the first study in this dissertation, Chapter 2 acts as a literature review, laying the groundwork for the subsequent chapters. Conducting this scoping review allowed me to gain a deep understanding of paid family leave policies and their relationship to the etiology of child maltreatment (Belsky, 1993). This review revealed that paid family leave is not solely a policy supporting economic stability or secure attachment; instead, it positively influences various aspects of family life during the fourth trimester, thereby reducing the risk of child maltreatment. This evidence further validates the empirical studies conducted in Chapters 3 and 4.

In Chapter 3, empirical evidence is presented on the impact of state-level paid family leave policies on rates of infant maltreatment by maltreatment type. Through a quasi-experimental design and rigorous analyses, this study reveals a correlation between the implementation of state-level paid family leave policies and a decrease in reports of infant neglect. This finding reinforces the importance of policies that promote household economic stability as a primary strategy for preventing child maltreatment (Bullinger et al., 2023; Fortson et al., 2016). However, the study also uncovers an unexpected correlation between the implementation of state-level paid family leave policies and an increase in reports of emotional abuse. This unexpected outcome emphasizes the need for further research and the importance of comprehensive and collaborative prevention and intervention mechanisms. Families involved

with the child welfare system face multiple stressors that require a dynamic approach to ensure child safety and promote family well-being.

Building on the insights from Chapter 3, Chapter 4 focuses on substantiated cases of infant neglect. This study examined how caregiver demographics, specifically sex and race, moderate the relationship between state access to paid family leave and rates of substantiated infant neglect. Examining these moderating variables revealed significant and complex interactions, highlighting different impacts based on caregiver demographics. The analyses revealed significant interactions between both female and male caregivers as perpetrators and access to paid family leave. These interactions show that the presence of paid family leave is associated with a decrease in infant neglect, particularly in states with a high proportion of female caregivers and a lower proportion of male caregivers. This suggests that both female and male caregivers may experience positive effects when living in a state with access to paid family leave, indicating the potential protective role of these policies. Furthermore, significant interactions were observed among white caregivers as perpetrators and access to paid family leave, indicating a decrease in infant neglect cases within this demographic group. Conversely, the interaction between non-white caregivers and access to paid family leave was found to be non-significant. While this may initially appear as a lack of impact, it is essential to interpret this result within the broader context of systemic inequities and disparities in access to resources. The non-significant interaction may illuminate the persistent challenges faced by non-white caregivers in accessing and benefiting from paid family leave policies, highlighting ongoing systemic barriers and the need for targeted interventions to address disparities in policy implementation and utilization.

These three studies collectively highlight the multiple positive impacts of paid family leave policies on child and family well-being and the potential reduction in infant neglect rates. This research underscores the importance of policies as early-life intervention tools. A recurring theme in this research is the need to address disparities in access to and benefits from paid family leave. The studies emphasize that while these policies have benefits across demographics, they are often more pronounced among privileged groups. They also call attention to the racial and socioeconomic disparities in access to these policies, highlighting the importance of ensuring equitable access for all caregivers.

Integration with Existing Research

Previous research has identified paid family leave as a promising tool for preventing child maltreatment (Klevens et al., 2016; Tanis et al., 2024). Building on this foundation, these three studies provide a detailed examination of the impacts of paid family leave policies on family well-being and the prevention of child maltreatment. They contribute to the growing body of literature that emphasizes the importance of policies in promoting family economic stability, positive child outcomes, and reducing the risk of maltreatment (Maguire-Jack et al., 2021; Fortson et al., 2016). By alleviating financial stress and providing families with resources to meet their children's needs, paid family leave policies create a supportive environment that fosters positive parent-child interactions and reduces the risk of maltreatment.

Without federal and state paid family leave policies, workplaces can facilitate meaningful change through organizational policies such as parental leave and flexible work arrangements that promote work-family balance and reduce parental stress (National Women's Law Center, 2015). These policies enable parents to prioritize caregiving responsibilities without compromising their employment, fostering healthier family dynamics. Furthermore, family-

friendly workplace practices, such as onsite childcare and breastfeeding support, promote positive parenting behaviors and enhance family well-being (Hwang, 2018). Access to high-quality early childhood education and care programs, supported by public policies, further reinforces the preventive effects of paid family leave by providing children with safe and nurturing environments outside of the home while ensuring parents can maintain employment and provide for their family (Green et al., 2020; Rochford et al., 2022; Zhai et al., 2013).

Policies supporting family economic stability must be complemented with the provision of necessary services and resources. For example, home visiting programs have been effective targeted interventions in providing crucial support to vulnerable families (Avellar & Paulsell, 2011; U.S. Department of Health and Human Services, 2023). These services complement upstream primary prevention efforts by providing guidance and resources, enhancing parenting skills, and promoting positive parent-child interactions among new parents. This research on paid family leave contributes to a broader understanding of the role of policies and practices in preventing child maltreatment. Integrating this work into existing research helps contextualize the policy implications of paid family leave. By addressing economic stressors, promoting work-family balance, improving child and parental health outcomes, and supporting positive parenting practices, paid family leave policies can contribute to a robust policy environment that creates safe and nurturing environments for children and families.

Policy Recommendations

This work has direct implications for policy development and recommendations, specifically related to paid family leave and beyond. Through this research, policymakers should prioritize developing inclusive policies that benefit caregivers across diverse demographics. The sheer nature of politics makes it difficult for social policy to fully capture the nuances of the

people it aims to help. However, policymakers must recognize that families come from various racial, ethnic, socioeconomic, and cultural backgrounds, each with unique challenges and strengths. Inclusive policies may include measures such as flexible leave options, culturally reflective resources, and language accessibility to ensure that all caregivers can access and benefit from these programs.

Paid family leave initiatives support individual health and well-being, as well as broader societal benefits. Paid family leave allows parents to bond with their new child, fostering crucial early connections that promote infant development and improve both parent and child's mental and physical health outcomes (Heymann et al., 2017). It also provides economic stability, helping families navigate caregiving responsibilities without financial strain during significant life events. Additionally, paid family leave policies promote gender equality by challenging traditional caregiving gender norms and enabling both mothers and fathers to participate equally in childcare responsibilities. Furthermore, businesses benefit from paid family leave policies through increased employee morale, productivity, and retention rates (Boushey et al., 2013; Gault et al., 2014). Employees with access to paid family leave are more likely to return to work and report higher job satisfaction, leading to long-term cost savings for employers. The literature punctuates that paid family leave policies support all families' health, well-being, and economic stability, contributing to strong families, healthier communities, and a more equitable society.

One of the critical challenges that emerged from this research is the disparities among marginalized communities in terms of child maltreatment outcomes and access to paid family leave. Therefore, it is crucial that policy provisions and implementation are intentional in addressing these disparities. This can be achieved by enacting policies that aim to reduce barriers faced by racialized and low-income families and developing targeted outreach and community

engagement initiatives. State-level paid family leave programs are increasingly focusing on equitable wage replacement formulas. These progressive formulas ensure that lower-wage earners can retain higher percentages of their wages while on leave (Shabo, 2024). Other strategies to ensure access and utilization among marginalized communities may include programs that provide specific support for single parents or caregivers with limited English proficiency. Understanding the unique needs of caregivers based on factors such as gender, race, and socioeconomic status can help design interventions that resonate with their experiences and provide necessary support for a healthy growth trajectory across the life course.

Policymakers and service providers must recognize that paid family leave is just one piece of the puzzle. While this research provides robust evidence supporting the advocacy for state and federal paid family leave policies, a concerted effort is needed to develop comprehensive support systems that complement paid family leave. These support systems can include affordable childcare, healthcare access, housing assistance, and educational support, all of which are fundamental to the well-being of families. Affordable childcare options can alleviate the financial burden on families and ensure that parents can re-enter the workforce after taking paid leave. Additionally, accessible healthcare services, including robust maternal and pediatric care, are crucial for maintaining the health and well-being of both caregivers and children. Housing assistance programs can provide necessary stability for families, reducing stressors that contribute to the risk of maltreatment risk. Furthermore, educational support, such as parenting classes and early childhood development programs, can empower caregivers with the knowledge and skills to create a nurturing environment.

Social Work Practice Implications

Social workers play a crucial role in advocating for inclusive policies that benefit caregivers from diverse backgrounds. This involves engaging in advocacy efforts at both the micro and macro levels. Social workers are uniquely attuned to the interplay between the broader social environment and individual and family outcomes. This dual focus has been the cornerstone of professional activism dating back to settlement houses that provided shelter, employment, childcare, and other vital services. These same settlement houses also catalyzed movements to address systemic needs and make homes and neighborhoods safer by implementing streetlights, the expiration date of milk, and the mother's pension program (Briar-Lawson et al., 2021). Social workers help families navigate available resources and partner with organizations to push for necessary policy changes. They are an integral collaborator with policymakers to participate in legislative advocacy and facilitate coalition building for developing, implementing, and promoting inclusive paid family leave policies.

In interpersonal practice, social workers can serve as bridges between families and various support systems. They empower and equip caregivers with the necessary skills, tools, and resources to create stable and nurturing environments. They also connect families with comprehensive support services and resources that protect against child maltreatment risk. However, child maltreatment prevention strategies should not solely focus on the caregiver-child relationship. It is important to address the broader community and systemic factors that contribute to maltreatment risk. Social workers can advocate for policy interventions that improve family well-being by addressing systemic issues such as intergenerational poverty, lack of access to resources, and systemic racism. This research on paid family leave can also inform the development of support services complementing these policies. Social workers can

collaborate with policymakers and community organizations to inform program design and implementation, filling gaps in services such as mental health resources, parenting education, caregiver support groups, and early childhood development programs.

Social work practitioners are trained to understand the diverse family structures involved in the child welfare system and the systemic inequities that contribute to maltreatment risk. Culturally informed social workers provide more competent and effective services and can advocate for and influence the development of more equitable policies. By understanding the intersection of race, gender, and socioeconomic status, social workers can advocate for policies that positively impact the well-being of society's most vulnerable families. Integrating this research into practice can improve outcomes for individual families and create lasting positive change in communities.

Future Research Directions

There is a dearth of research examining the effects of economic support policies, including paid family leave, on families involved in the child welfare system. While population-level research provides valuable insights into broad policy effects, it is essential to understand how these policies interact with families in the child welfare system. Qualitative research can offer a deeper understanding of the attitudes and experiences of child welfare involved or at-risk families with state-level paid family leave policies. Additionally, exploring how these policies influence caregiver behavior within the context of child welfare involvement and their impact on child maltreatment risk can provide nuanced insights into the effectiveness of such policies for vulnerable populations.

As more states continue to implement paid family leave policies, future research should focus on conducting longitudinal studies to assess the long-term effects of these policies,

specifically in the context of child maltreatment prevention. Longitudinal research can track changes in child well-being, family dynamics, and caregiver outcomes over time, providing a comprehensive understanding of the lasting impacts of paid family leave. These studies can also explore how families adapt to and utilize paid family leave benefits over several years, exposing patterns of usage and effectiveness.

In future research efforts, it is vital to prioritize collecting more robust and detailed data, particularly data that can be disaggregated by caregiver demographics, even for unsubstantiated child welfare cases. Deeper insights into the impacts of paid family leave on different racial and ethnic groups of caregivers can reveal important disparities in access, utilization, and outcomes. Researchers can develop more targeted and equitable policy recommendations by examining how these policies affect caregivers from diverse backgrounds.

Taking an intersectional approach in future research is crucial to understanding how maltreatment prevention strategies and policy development intersect with systemic inequalities such as racism and gender norms. Researchers should explore how paid family leave policies interact with multiple dimensions of identity, including race, gender, socioeconomic status, and more. This approach can uncover the complex ways in which policy impacts are shaped by the overlapping and intersecting systems of privilege and disadvantage that individuals and families experience, particularly families at high risk of child maltreatment. Understanding these intersections can inform the development of a more inclusive, effective, and equitable policy and prevention landscape that addresses the diverse needs of caregivers and families.

Conclusion

The dissertation offers valuable insights into the impact of state-level paid family leave policies on family well-being and child maltreatment prevention. This research contributes to

academic literature and has tangible implications for policy development, social work practice, and future research. Moving forward, it is essential to continue exploring the nuanced effects of paid family leave, ensuring that policies are not only accessible but also tailored to meet the diverse needs of families.

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