



Early childhood education and care policies in the U.S. And their impact on family violence

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ABSTRACT

The current study sought to understand existing literature regarding the relationship between early childhood education and care policies in the U.S. (i.e., childcare subsidies, Head Start, and universal pre-k) and family violence (i.e., child maltreatment and IPV). We examined articles that assessed either of these two family violence outcomes or their related risk factors, including food insecurity, employment, poverty, and parental mental health issues. We conducted a rapid review of literature from the following academic databases: Web of Science, Academic Search Complete, and JSTOR. We examined peer-reviewed journal articles that were published in English between the years of 1996 to 2021. Few studies have investigated the associations between early childhood education and care policies and family violence outcomes. However, of those studies that have examined associations between early childhood education and care policies and family violence outcomes, there is promising evidence to support these policies as a violence prevention strategy.

1. Introduction

The first few years of life represents a window of immense developmental opportunity for children yet also a time of potential risk (Nelson et al., 2019; Shonkoff et al., 2021). When provided with safe, stable, nurturing relationships and environments, children develop biological, physical, social, and emotional skills necessary to thrive (Merrick & Guinn, 2018). However, when children live in environments marked by extreme adversity, material hardship, and violence, they are at increased risk of a number of adverse outcomes throughout the life course. Strategies to support families by reducing the financial and logistical burden of child care and programs that create positive environments for children outside of the home through childcare subsidies, Head Start, or pre-kindergarten (pre-K) have the potential to mitigate, buffer, or prevent the early adversity, including family violence.

Experiencing family violence as a child is relatively common. In 2019, nearly 3.5 million children received a formal Child Protective

Services (CPS) investigation for allegations of child abuse or neglect (USDHHS, 2021). Through formal investigation, 656,000 children were determined to be victims of abuse or neglect, with 75 % of substantiations representing child neglect. The youngest children, those under the age of 1 year, were at the highest risk for child maltreatment. The effects of child abuse and neglect can be severe and long lasting. Longitudinal studies have shown that children who experience abuse or neglect are at increased risk for mental health challenges, substance use, criminal and delinquent behavior, health complications, and economic challenges in adulthood (Currie & Tekin, 2012; Currie & Widom, 2010; Herrenkohl et al., 2013; Klika et al., 2013). It is estimated that addressing both the tangible and intangible costs associated with child abuse and neglect over a person's life is nearly \$830,928 in 2015 dollars (Peterson et al., 2018).

Childhood exposure to intimate partner violence (IPV) has also been associated with negative behavioral, emotional, and social outcomes in children (Niolon et al., 2017; Taylor & Sorenson, 2007). Data from the

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National Intimate Partner and Sexual Violence Survey (NISVS) show that many adults report experiences of IPV across the life course. Nearly 23 % of women and 14 % of men report severe physical IPV at some point in their life with nearly 47 % of men and women reporting lifetime incidence of psychological aggression (Niolon et al., 2017). While there are limited data on children's exposure to IPV, it is estimated that between 3 and 10 million children annually witness IPV (Smith et al., 2018; Niolon et al., 2017). However, there is scant research on the effects of early childhood policies to prevent child maltreatment and IPV and the related risk factors that may mediate the relationship between the policies and outcomes. As such, this paper aimed to review and summarize the literature on childcare subsidies, Head Start, and universal pre-K as a strategy for preventing multiple forms of violence and (i.e., child maltreatment, IPV) on key mediating risk factors.

1.1. U.S. Early childhood education and care policies

1.1.1. Childcare Subsidy.

The federal government established the Childcare Development Fund (CCDF) in the mid- 1990 s to remove barriers to work for low-income parents. The program must be used to provide financial assistance to low-income families to access childcare so that they can work or attend a qualified job training or educational program. Childcare subsidies are provided as a block grant program in the U.S. and therefore, states have a great deal of discretion in how the program is administered and the specific policies guiding subsidy provision. States have the ability to set policies related to eligibility requirements for caregivers and children, application, waitlist, and redetermination requirements, family copayment policies, and provider requirements and reimbursement rates (Dwyer et al., 2020). As a result, this wide variation in policy implementation impacts the ability of parents to access the subsidy as well as their overall economic well-being and could potentially affect the overall impact of the block grant program.

1.1.2. HeadStart.

In 1965, Project Head Start was launched as an eight-week summer program by the Office of Economic Opportunity as a program that breaks the cycle of poverty by comprehensively meeting the academic, cognitive, physical, and socioemotional needs of young children (age 3 to 5) from families with low income. Along with promoting children's school readiness, the program supports children's health and family wellbeing through nutritious meals and parent education services (U.S. Department of Health and Human Services, 2020b). Early Head Start (EHS) launched in 1995 as part of the reauthorization of Head Start, extending services to children prenatal to age 3 from families with low income. Head Start and EHS are free to eligible families (i.e., from low-income backgrounds with children between the ages 0 and 5). Within Head Start and EHS, there have been efforts developed to address IPV (U.S. Department of Health and Human Services, 2019, 2020a). For example, the Early Childhood Learning and Knowledge National Center, responsible administering Head Start and EHS, developed an evidence-based process known as Confidentiality, Universal Education, Empowerment, and Support (CUES) to help program staff talk about IPV with families (U.S. Department of Health and Human Services, 2019).

1.1.3. Universal Pre-K.

Universal pre-K provides government-funded access to preschool programs to children regardless of family income or other criteria. Universal preschool policies provide a framework for voluntary preschool services for young children and have been adopted by numerous state and local governments. For example, Georgia expanded access to existing pre-kindergarten services to include all 4-year-old children, making it the first state to implement a statewide universal pre-K program. Other states such as Florida, Illinois, Iowa, New York, Oklahoma, Vermont, Wisconsin, and West Virginia, as well as the District of Columbia have subsequently adopted similar universal or near universal

programs. However, there are some variations between each state's policy and its implementation, including differences in funding levels, instructional hours, curriculum standards, and teaching certifications and practices. In fact, according to a report by the Education Commission of the States, only the programs offered in Vermont, Florida, and the D.C. are considered to be truly universal, as participation in these programs is not limited by enrollment deadlines, funding amounts, or the number of enrollees (Parker et al., 2018).

1.2. Risk and protective factors addressed by early childhood education and care policy to prevent family violence

Fig. 1 displays our proposed theoretical model linking early childhood education and care policy to family violence. Child maltreatment and IPV share many similar risk and protective factors (Fig. 1) and many of these factors may influence family risk when they are present at the individual or at the community level. Parental stress, as assessed by relationship quality between parents, and parent mental health such as depression, among other measures, is a risk factor for child maltreatment and IPV (Capaldi et al., 2012; Lehrer et al., 2006; Stith et al., 2009). Parents who struggle to meet basic needs, including safety, employment, and economic stability are at an increased risk factors for both child maltreatment and IPV (Wilkins et al., 2014; Stith et al., 2009). At the community level, communities with high unemployment rates, low incomes, and poverty, i.e. difficulty meeting basic needs and causing high levels of parenting stress there is elevated prevalence of child maltreatment and IPV (Fox & Benson, 2006; Maguire-Jack & Font, 2017; Pinchevsky & Wright, 2012). The significant overlap in risk factors supports a public health approach to addressing these shared risk factors to prevent violence and create conditions for child health and well-being (Herrenkohl et al., 2016).

There are also factors that are associated with only child maltreatment or IPV. For example, parenting skills and knowledge are associated with maltreatment risk but not IPV. Programs or educational resources that increase parenting knowledge, competence, or positive and warm parenting have reduced the incidence of child maltreatment (Altafim & Linhares, 2016; Chen & Chan, 2016; Shapiro, 2012), IPV, is often associated with power imbalances in intimate partner relationships (Capaldi et al., 2012; Jewkes et al., 2002; Kim & Emery, 2003), are often enforced through financial dependence of the victims towards their perpetrators (Coleman & Straus, 1986). Thus, economic empowerment is particularly important for the promotion of well-being in IPV survivors (Hahn & Postmus, 2014).

As proposed in Fig. 1, these risk factors that could be addressed by early childhood care policies to help reduce child maltreatment and IPV. We propose first, that, by virtue of increasing access to quality childcare and education, early care policies may increase knowledge of child development and parenting through increased exposure to teachers with knowledge in these areas, as well as to peers who are also parenting. Second, that through having respite time away from children, reduced stress related to managing care arrangements, having additional income from subsidy and increased employment, and increased social support, parents will have reduced levels of stress. Third, through increased levels of income and safe and quality care for children, children's basic needs will be met to reduce child maltreatment occurrence. Childcare subsidies are expected to decrease parental stress by increasing the overall family income and increasing social support for those caregivers who are at risk for IPV. Similarly, childhood subsidies support caregivers' ability to seek employment and achieve financial independence. Early childhood education and care programs allow caregivers to obtain childcare, thus allowing them to enter the workforce where they may otherwise be home-bound by childcare responsibilities. Childcare subsidies are also proposed to allow parents to meet their family's basic needs that is expected to contribute to a survivor's ability to leave a violent situation.

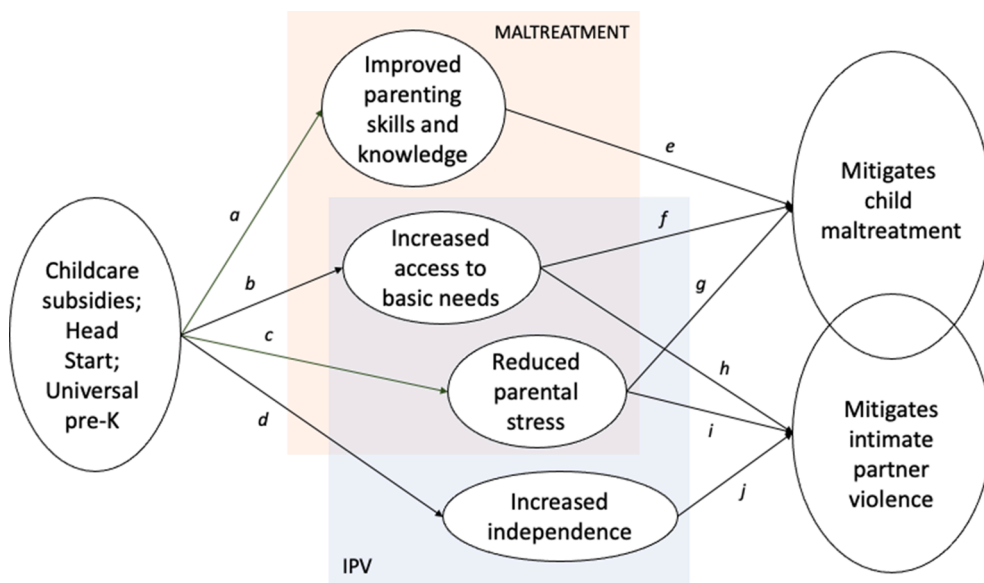


Fig. 1. Proposed theoretical model of how policies that support children and families (hereafter pro-child policies) can help mitigate child maltreatment and intimate partner violence by increasing protective and reducing risk factors. Childcare policies can improve parenting skills and knowledge (path a) by providing educational resources, which in turn increase positive parenting and reduce use of harsh parenting (path e). Childcare policies can also provide safe care for children and financial means to provide and maintain residential stability and other basic needs (path b), factors that would reduce child abuse and neglect (path f) and improve bargaining power in a relationship (path h). Relatedly, benefits from childcare policies can reduce parental stress (path c), which improves parents’ mental health and partner relationship satisfaction, thus decreasing incidence of child maltreatment (path g) and intimate partner violence (path i). Finally, childcare policies can also promote economic independence in a relationship (path d), which helps to power imbalance related to intimate partner violence (path j).

1.3. Current study

The current study sought to summarize existing literature regarding the relationship between early childhood education and care policies in the U.S. (i.e., childcare subsidies, Head Start, and universal pre-k) and family violence (i.e., child maltreatment and IPV). We examined articles that assessed either of these two family violence outcomes or their related risk factors, including food insecurity, employment, poverty, and parental mental health issues. This study is the first review to examine the relationship between U.S. early childhood education and care policies and family violence, as well as key risk factors for family violence.

2. Methods

2.1. Rapid review

We conducted a rapid review for the current study. A rapid review involves transparent and reproducible search methods with a focused number of sources (Haby et al., 2016; Tricco et al., 2015). It is critical and rigorous, but time limited (Khanguera et al., 2012). We opted to conduct a rapid review to pull together information quickly because of the critical policy moment surrounding early childhood education in the United States due to the COVID-19 pandemic. COVID-19 resulted in the closure of many childcare centers around the country, which put working parents into a precarious situation. Consequently, there has been wide recognition of the importance of early childhood education by citizens and policymakers alike, and a willingness to increase investments in such programs.

To conduct our rapid review of the relationship between the identified early childhood education and care policies and child maltreatment and IPV, we conducted a literature search of the following academic databases: Web of Science, Academic Search Complete, and JSTOR. We examined peer-reviewed journal articles that were published in English between the years of 1996 to 2021. The year 1996 was selected because it was the year of the federal legislation Personal Responsibility and Work Opportunity Act, which included a major overhaul of the welfare program in the United States and instituted the Child Care Development Fund. In the years that followed, a large body of research proliferated to understand the impact of these policy changes on families.

We used the following search terms to identify appropriate articles: “child abuse;” “child physical abuse;” “child emotional abuse;” “child sexual abuse;” “child neglect;” “child maltreatment;” “child welfare;” “child protective services” “adverse childhood experiences;” “corporal punishment;” “intimate partner violence;” “domestic violence;” “family violence;” “material hardship;” “economic hardship;” food insecurity;” “financial hardship;” “poverty;” “maternal/paternal/parental employment;” “maternal/paternal/parental depression;” “maternal/paternal/parental anxiety;” and “maternal/paternal/parental mental health” in combination with “childcare subsidy;” “childcare subsidy;” “HeadStart;” “Head Start;” “Early HeadStart;” “Early Head Start;” “Universal/publicly funded pre-K;” “Universal/publicly funded preschool;” “Universal/publicly funded pre-school;” and “Universal/publicly funded pre-kindergarten.” JSTOR returned an excess of 10,000 articles when we conducted the broad search. We examined the search results and determined that this search engine was providing many articles that were not related. As such, for JSTOR, we opted to conduct our search for terms appearing in the title and/or abstracts only. We limited our search to empirical, peer reviewed articles that had an outcome related to the specified search terms. The articles were reviewed and selected by the three members of the research team.

Three researchers (the first three authors on this manuscript) were involved in the article search process. Each article was reviewed by one researcher and the team of three met regularly to discuss findings, including uncertainties about exclusions and classifications. Exclusion criteria were determined a priori, which included articles that were not quantitative empirical studies, articles published in a language other than English, and articles that did not include a measure of the key independent and dependent variables. A data abstraction table was created in Microsoft Excel, which included citation information, study goal, abstract, sample, data sources, predictor and description of measure, outcome and description of measure, outcome category, location of study, primary analytic method, main findings, reason for exclusion (if applicable), and notes for discussion.

The search process produced 697 articles that fit our search criteria. We excluded 118 articles that were not quantitative empirical studies and 539 that did not include a measure of the program as an independent variable and/or any of our outcomes. This process produced 40 peer-reviewed articles that were included for review. See Fig. 2 for details of the search and selection process for the final set of articles.

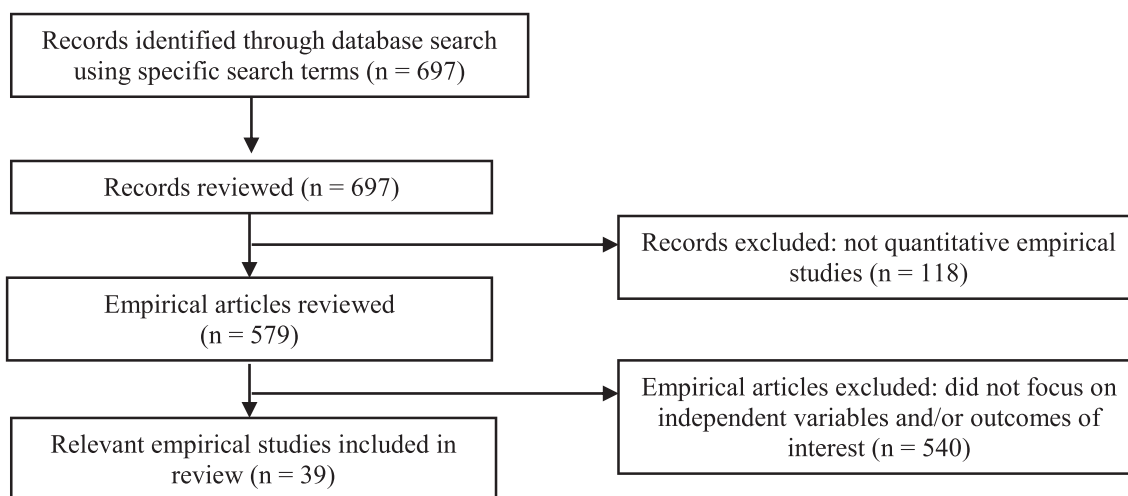


Fig. 2. Detailed search and selection process of relevant articles for the rapid literature review.

3. Results

3.1. Childcare subsidy

Table 1 provides a summary of the findings related to childcare subsidy. Of the relevant 23 articles we found related to childcare subsidy, four articles had outcomes that were proxies for child maltreatment and no article had outcomes that were proxies for IPV. In terms of risks for family violence, 18 articles related to employment and income outcomes, and two related to parental mental health. One article examined both parental mental health outcomes, as well as child maltreatment, and is therefore counted in both categories.

3.2. Childcare subsidy and family violence

The four articles examining childcare subsidy and child maltreatment had mixed findings on the relationships. Two studies found positive impacts of childcare subsidy (Maguire-Jack, Purtell, Showalter, Barnhart, & Yang, 2019; Meloy, Lipscomb, & Baron, 2015; Yang, Maguire-Jack, Showalter, Kim, & Slack, 2019), one had mixed findings (Meloy et al., 2015), and one found negative consequences (Herbst & Tekin, 2014). Specifically, one study found that an individual's receipt of childcare subsidy was related to fewer reports of investigated physical abuse and neglect (Yang, Maguire-Jack, Showalter, Kim, & Slack, 2019), while another found it was related to decreased self-reported supervisory neglect (Maguire-Jack et al., 2019). Meloy et al. (2015) found that states that prioritized childcare subsidy access for child welfare-involved families had lower rates of entry to foster care than those states that did not, but children who were removed to foster care had more placements while in care. Finally, one study found that receipt of childcare subsidy was associated with higher levels of self-reported physical and psychological aggression (Herbst & Tekin, 2014).

Child maltreatment was measured in two different ways in the four identified articles. Two studies relied on administrative child welfare data, with one study examining individual investigated reports of both abuse and neglect (Yang, Maguire-Jack, Showalter, Kim, & Slack, 2019) and the other relying on state-level rates of child removal into out-of-home care for reasons of abuse and neglect (Meloy et al., 2015). The other two studies both relied on the validated child maltreatment measure, the Parent-Child Conflict Tactics Scale (PC-CTS; (Herbst & Tekin, 2014; Maguire-Jack et al., 2019; Straus et al., 1998), with Herbst and Tekin (2014) examining psychological and physical abuse and Maguire-Jack (2019) examining child neglect. Three of these studies examined parents' individual behaviors (Herbst & Tekin, 2014; Maguire-Jack, Purtell, Showalter, Barnhart, & Yang, 2019; Yang,

Maguire-Jack, Showalter, Kim, & Slack, 2019), while one study examined state-level rates of maltreatment (Meloy et al., 2015). Childcare subsidy was measured using administrative records in one study (Yang, Maguire-Jack, Showalter, Kim, & Slack, 2019) and self-report in two studies (Herbst & Tekin, 2014; Maguire-Jack et al., 2019). The fourth study examined childcare subsidy policies and examined variations in policies at the state level (Meloy et al., 2015).

This research relied on a variety of samples to examine the relationship between childcare subsidy and child maltreatment. One study used national administrative data from the Adoption and Foster Care Analysis and Reporting System (AFCARS) (Meloy et al., 2015), while the other three relied on survey data. Yang and colleagues (2019) used a combination of survey information from TANF recipients within the Illinois Family Study (IFS) and administrative data from the State of Illinois representative survey data, one from the Fragile Families and Child Wellbeing Study (FFCWS) (Maguire-Jack et al., 2019) and the other using FFCWS in addition to the Early Childhood Longitudinal Study – Kindergarten Cohort (ECLS-K) and the DDB Worldwide Communications Life Style survey (Herbst & Tekin, 2014). The IFS and FFCWS samples included many low-income individuals, while the ECLS-K and DDB samples were more economically diverse. The differences in the findings between the Herbst and Tekin (2014) study and the Yang and colleagues (2019) study may be driven by sample selection. Specifically, Herbst and Tekin (2014) examined the samples without accounting for income status, while Yang and colleagues (2019) were using a sample of recipients of TANF. As a result, Yang and colleagues (2019) were comparing those receiving childcare subsidies to those who were not among a sample of very low-income parents.

3.3. Childcare subsidy and family violence risk factors

The vast majority of the studies identified through our search strategy were in relation to employment and income. Given the original intent of the childcare subsidy legislation was to reduce barriers to work, the focus on employment and income outcomes in this body of work is expected. The majority (17 of the 18) articles we identified found positive work outcomes for recipients of childcare subsidy, including a greater likelihood of working, working standard hours compared to non-standard hours, working full time over part-time, reduced number of problems with childcare interfering with work, additional hours of work, and increased income. Only one study did not find a significant impact of childcare subsidy on work outcomes (Black, Devereux, Løken, & Salvanes, 2014).

Several different measures of work were used in the identified

Table 1
Summary of studies examining childcare subsidy.

| Citation | Sample (description, location, size) | Outcome studied (description of measure) | Independent variable (description of measure) | Study design | Main findings |
|---|--|--|--|---------------|--|
| <i>Child Maltreatment Outcomes</i> | | | | | |
| Herbst & Tekin (2013) | Data source: Fragile Families and Child Wellbeing Study (national); Early Childhood Longitudinal Study – Kindergarten Cohort Sample: For Fragile Families, participated in one of the first three waves of data collection; n = 3,100. For Early Childhood Longitudinal Study, n = 3,378 mothers. Sample was not restricted to those who are eligible for childcare subsidy; eligibility for CCS likely correlated with other risk factors. | Self-reported child maltreatment (any type) | Self-report of childcare subsidy receipt | Associational | Receipt of childcare subsidy associated with higher levels of maltreatment. |
| Maguire-Jack et al. (2019) | Data source: Fragile Families and Child Wellbeing Study (national) Sample: Mothers who participated in the age 3 surveys, and had full information on study variables; n = 1,179. Sample restricted to mothers who were income-eligible for childcare subsidy | Self-reported child maltreatment (separated by maltreatment type) | Self-report of childcare subsidy receipt | Associational | Among subsidy-eligible families, receipt of childcare subsidy associated with lower reported supervisory neglect. |
| Meloy et al. (2015) | Data source: Adoption and Foster Care Analysis and Reporting System Sample: 49 states, DC, Puerto Rico | State-level number of removals, number of placements during current removal, and types of placements | Policy variables:(1) activity requirements for parents and foster parents to receive subsidies;(2) whether or not priority for subsidy receipt was given to these parents;(3) whether any accommodations were made to reduce co-pay requirements | Associational | States with accommodating policies on the three dimensions had significantly fewer home removals. States with accommodating policies had a significantly higher average number of foster care placements. |
| Yang, Maguire-Jack, Showalter, Kim, & Slack, (2019) | Data source: Illinois Family Study Sample: Illinois families receiving TANF in 1998; n = 1,260 adults | Investigated reports of physical abuse and neglect (analyzed separately) from DCFS administrative data | Administrative data on childcare subsidy receipt; work hours; income | Associational | Receipt of childcare subsidy related to decreased physical abuse report risk, mediated by working hours and household income. |
| <i>Parental Mental Health Outcomes</i> | | | | | |
| Healy & Dunifon (2014) | Data source: Fragile Families and Child Wellbeing Study (national) Sample: Mothers who participated in the age 1 and 3 surveys, were income-eligible for subsidy, and had full information on study variables; n=684–1,189 depending on the model Sample restricted to mothers who were income-eligible for childcare subsidy | Self-reported parenting stress, maternal depression | Self-report of childcare subsidy receipt | Associational | Among subsidy-eligible families, receipt of childcare subsidy marginally related to higher parenting stress. Among mothers whose focal child was a boy, receipt of subsidy related to higher maternal depression. |
| Herbst & Tekin (2013) | Data source: Fragile Families and Child Wellbeing Study (national); Early Childhood Longitudinal Study – Kindergarten Cohort Sample: For Fragile Families, participated in one of the first three waves of data collection; n = 3,100. For Early Childhood Longitudinal Study, n = 3,378 mothers. Sample was not restricted to those who are eligible for childcare subsidy. | Self-reported parent health, mental health, parenting stress | Self-report of childcare subsidy receipt | Associational | Receipt of childcare subsidy associated with lower levels of overall health and higher levels of anxiety, depression, and parenting stress. |

Work/Economic Outcomes

(continued on next page)

Table 1 (continued)

| Citation | Sample (description, location, size) | Outcome studied (description of measure) | Independent variable (description of measure) | Study design | Main findings |
|--|---|---|---|--------------------------|---|
| Ahn (2012) | Data source: Survey of Income and Program Participation Sample: single mothers age 16–52, n = 7,891 | Self-report of employment status, and number of weeks at the job; | Self-report of childcare subsidy receipt | Associational | Subsidy receipt associated with greater likelihood of working |
| Bainbridge et al. (2003) | Data source: Current Population Survey Sample: Single mothers of children under 13; n = 51,828 | Changes in mean employment over time | State-level indicators of expenditures on childcare subsidies | Quasi-experimental | Increases in childcare spending increase employment |
| Black, Devereux, Løken, & Salvanes, (2014) | Data source: Administrative data in Norway Sample: n = 367,836 parents | Labor market participation | Income, because subsidy is widely available | Associational | Childcare subsidy not significantly related to parental labor force participation |
| Blau & Tekin (2007) | Data source: National Survey of America's Families Sample: Households headed by an unmarried mother with at least one child under the age of 13, n = 2,461 | Employment | Self-report of childcare subsidy receipt | Associational | Childcare subsidy associated with increased likelihood of being employed |
| Danziger et al. (2004) | Data source: Women's Employment Study, one urban Michigan county Sample: subsidy eligible women, n = 529 | Proportion of months worked, earnings in prior month | Self-report of childcare subsidy receipt | Associational | Childcare subsidy associated with increased work duration and earnings |
| Ficano et al. (2006) | Data source: Administrative data from Connecticut, Florida, and Minnesota Sample: n = 1,002 Connecticut; n = 734 Florida; n = 423 Minnesota | Earnings; whether or not mother remains on welfare based on administrative data | Childcare subsidy receipt based on administrative data | Associational | Receipt of childcare subsidy reduces time to substantial employment |
| Gennetian et al. (2004) | Data source: 21 employment programs across Canada and the United States Sample: Single parents primarily from local welfare populations | Childcare-related barrier to seeking or maintaining employment | Self-reported childcare subsidy receipt or administrative data on subsidy receipt | Randomized Control Trial | Programs that expanded childcare tended to reduce reports of childcare problems that interfered with employment |
| Ha (2009) | Data source: Administrative data from the State of Wisconsin Sample: 16,815 families who were income eligible for childcare subsidy | Earnings based on administrative data | Months of childcare subsidy receipt, based on administrative data | Associational | Long-term use of childcare subsidies associated with increases in mothers' earnings |
| Ha & Miller (2015) | Data source: Administrative data from the State of Wisconsin Sample: 8,894 families who were income eligible for childcare subsidy | Earnings and labor force attachment, based on administrative data | Cumulative months of childcare subsidy receipt over 48 months, based on administrative data | Associational | Receipt of > 1 year of childcare subsidy associated with higher earnings and number of quarters employed |
| Herbst (2008) | Data source: Current Population Survey Sample: Single mothers of at least one child age 0–18; n = 120,189 | Any work, work and no welfare, full-time full-year employment | Federal and state expenditures on childcare subsidies | Associational | Childcare subsidies positively associated with employment for any work and work/no welfare |
| Huston et al. (2001) | Data source: New Hope program evaluation, Milwaukee, WI Sample: n = 913 participants in New Hope | Number of quarter-years of employment based on administrative records | Participation in New Hope (included childcare subsidies) | Randomized Control Trial | Participation in New Hope associated with employment for more time |
| Marshall et al. (2013) | Data source: Survey data collected in two urban communities in Massachusetts Sample: n = 655 families | Self-reported employment | Self-report of childcare subsidy receipt | Quasi-experimental | Families with subsidies less likely to work part-time, more likely to work full-time when compared to other low income families not receiving subsidies |
| Meyers et al. (2002) | Data source: Aid to Families with Dependent Children Household Survey, California Sample: Single mothers with at least one child under age 14; n = 903 | Self-reported labor market activity | Self-report of childcare subsidy receipt | Associational | Receipt of childcare subsidy associated with greater likelihood of employment |
| Press et al. (2006) | Data source: Philadelphia Survey of Child Care and Work | Self-reported work-hour problems – Change work schedule, reduce hours, and/ | Self-report of childcare subsidy receipt | Quasi-experimental | Childcare subsidy associated with decreased work-hour problems |

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Table 1 (continued)

| Citation | Sample (description, location, size) | Outcome studied (description of measure) | Independent variable (description of measure) | Study design | Main findings |
|---|---|--|---|--------------------|---|
| Queralt et al. (2000) | Sample: 191 mothers who received or applied for childcare subsidy Data source: Administrative data from Miami-Dade County, Florida | or avoid a better position because of childcare. Earnings; probability of work based on administrative data | Funding available for childcare subsidy | Quasi-experimental | Increased funding for childcare subsidy associated with increased work and increased earnings |
| Showalter et al. (2018) | Sample: Families receiving welfare benefits; n = 4,399 Data source: Illinois Family Study | Work status; number of working hours | Self-reported intimate partner violence; childcare subsidy receipt based on administrative data | Associational | Childcare subsidy receipt moderates the relationship between intimate partner violence and both work outcomes |
| Tekin (2007) "Single mothers working at night..." | Sample: Illinois families receiving TANF in 1998; n = 1,1100 adults Data source: National Survey of America's Families | Working at a standard job (traditional work hours, M–F 8am–6 pm), based on self report | Self-report of childcare subsidy receipt | Associational | Childcare subsidy receipt associated with greater likelihood of working standard hours |
| Tekin (2007) "Childcare subsidies, wages..." | Sample: single mothers with at least one child under the age of 13, n = 4,405 Data source: National Survey of America's Families | Part- or full-time work; wage rate | Mothers who report receiving assistance from a welfare or social services agency are coded as receiving a childcare subsidy | Associational | Childcare subsidy associated with additional hours of work |

studies. These included labor force participation (Ha & Miller, 2015; Meyers, Heintze, & Wolf, 2002; Showalter, Maguire-Jack, Yang, & Purtell, 2019; Ahn, 2012; Bainbridge et al., 2003; Black, Devereux, Løken, & Salvanes, 2014; Blau and Tekin, 2007; Herbst, 2008; Queralt et al., 2000), number of hours or weeks working (Ahn, 2012; Blau & Tekin, 2007; Danziger et al., 2004; Gennetian et al., 2004; Huston et al., 2001; Marshall et al., 2013; Showalter et al., 2019), earnings (Danziger et al., 2004; Ficano et al., 2006; Ha, 2009; Ha & Miller, 2015; Huston et al., 2001; Queralt et al., 2000), working standard hours versus non-standard hours or a more preferred shift (Press et al., 2006; Tekin, 2007b), and working full time compared to part time (Marshall et al., 2013).

To examine childcare subsidy receipt, five studies used administrative data (Ficano et al., 2006; Ha, 2009; Ha & Miller, 2015; Huston et al., 2001; Showalter et al., 2019). Other studies used self-reported receipt of childcare subsidy (Ahn, 2012; Blau & Tekin, 2007; Danziger et al., 2004; Gennetian et al., 2004; Marshall et al., 2013; Meyers et al., 2002; Press et al., 2006; Tekin, 2007a, 2007b), or state-level childcare policies or expenditures on subsidies (Bainbridge et al., 2003; Black, Devereux, Løken, & Salvanes, 2014; Herbst, 2008; Queralt et al., 2000).

The studies also used a variety of samples to examine the impact of childcare subsidy on employment and income outcomes. Two studies used international or partially international samples, including one set in Norway (Black, Devereux, Løken, & Salvanes, 2014) and one in both the U.S. and Canada (Gennetian et al., 2004). Six studies used national samples from the U.S. (Ahn, 2012; Bainbridge et al., 2003; Blau & Tekin, 2007; Herbst, 2008; Tekin, 2007a, 2007b), and the remaining used samples from individual states within the U.S. (Danziger et al., 2004; Ficano et al., 2006; Gennetian et al., 2004; Ha, 2009; Ha & Miller, 2015; Huston et al., 2001; Marshall et al., 2013, 2013; Meyers et al., 2002; Press et al., 2006; Queralt et al., 2000; Showalter et al., 2019).

The research team identified two articles examining the impact of childcare subsidy on parental mental health (Healy & Dunifon, 2014; Herbst & Tekin, 2014), and these studies had mixed findings. Maternal depression and anxiety were assessed using the Composite International Diagnostic Interview in both studies. Childcare subsidy was measured using self-reported receipt. Both studies relied on nationally representative datasets. The study by Herbst and Tekin (2014) found that receipt of childcare subsidy was associated with increased anxiety and depression in mothers, but Healy and Dunifon (2014) found that these relationships were not statistically significant after using propensity score matching to isolate the impact of the subsidy itself. Taken together,

these studies suggest that receipt of childcare subsidy may not be related to maternal mental health, after accounting for selection issues.

3.4. Head Start

Table 2 provides a summary of the findings related to Head Start. Of the 15 relevant articles we found related to Head Start and EHS, 11 articles had outcomes that were proxies for child maltreatment, and one had an outcome that was a proxy for IPV. Regarding risk factors for family violence, three articles had outcomes related to parental mental health (specifically, parental depression), one article had outcomes related to parental employment, and one article had outcomes related to poverty. Two articles examined outcomes related to depression, IPV, and/or child maltreatment and were therefore counted twice. Among these 15 studies, five studies included both center-based and home-based Head Start/EHS programs (Berlin et al., 2011; Chazan-Cohen et al., 2007; Green et al., 2014, 2020; Love et al., 2005), six examined programs with exclusively center-based delivery (Ansari et al., 2016; Ansari & Gershoff, 2016; K. Lee & Rispoli, 2017; Pratt et al., 2015; Sabol & Chase-Lansdale, 2015; Zhai et al., 2013), and four did not distinguish between center-based or home-based service delivery type (Klein et al., 2017; R. Lee et al., 2014; Magnuson & Waldfogel, 2005; Scarborough et al., 2021).

3.5. Head Start/Early Head Start and family violence

Results varied among the 11 studies that examined the association between Head Start participation and child maltreatment outcomes. Four studies concluded that Head Start led to positive outcomes - Head Start children were less likely to be placed in foster care (Klein et al., 2017) and experience fewer instances of reported spanking (Love et al., 2005; Pratt et al., 2015; Zhai et al., 2013). Four studies found that Head Start had a positive effect on parental child maltreating behaviors, but only for a select group of families. Specifically, Head Start participation was associated with less reported use of physical punishment in: boys, but not girls (R. Lee et al., 2014); two-parent families and families with income less than twice the poverty line, but not families with low maternal education or single-parent families (Magnuson & Waldfogel, 2005); families who were more frequently using corporal punishment on their children than those who were not (Ansari et al., 2016); and families with mothers who reported high, but not low, attachment anxiety (Berlin et al., 2011). One study found that EHS participation was related

Table 2
Summary of studies examining Head Start.

| Citation | Sample (description, location, size) | Outcome studied (description of measure) | Independent variable (description of measure) | Study design | Main findings |
|------------------------------------|---|---|--|--------------------------|---|
| <i>Child Maltreatment Outcomes</i> | | | | | |
| Klein et al. (2017) | Data Source: Second National Survey of Child and Adolescent Well-Being (NSCAW-II) | Foster care placement at wave 2 (y/n) | Childcare subsidy receipt; type of childcare subsidy or arrangement (e.g., Head Start) | Associational | Head Start children had lower odds of being placed in foster care at wave 2 (18 months later) compared to non-Head Start peers who were in some other childcare arrangement |
| Zhai et al. (2013) | Sample: Children included in waves 1 and 2; n = 1,995 Data Source: Fragile Families and Child Wellbeing Study (FFCWS) | Parent-reported child disciplinary practices and maltreatment; CPS contact (y/n) | Childcare arrangement (exclusively parental care; Head Start; pre-kindergarten; other center-based care) | Quasi-experimental | Head Start children less likely to be spanked by their parents |
| Lee et al. (2014) | Sample: Children with valid childcare arrangement information; n = 2,807 Data Source: Early Childhood Longitudinal Study—Birth Cohort (ECLS-B) | Parent-reported frequency of spanking; spanking in a hypothetical scenario (y/n) | Head Start regular attendance (y/n) | Quasi-experimental | Head Start children less likely to experience spanking in the past week and among boys compared to girls in hypothetical situation |
| Ansari & Gershoff (2016) | Sample: Families with valid information on Head Start and outcomes; n = 7,000 Data Source: Family and Child Experiences Survey (FACES) | Parent-reported parenting behavior (involvement, spanking, controlling, problem behaviors) | Self-reported parent involvement in Head Start activities | Associational | Head Start participation associated with improvements in controlling behavior in the subsequent year. Indirect effect from Head Start involvement to reduce spanking by reducing controlling behavior. |
| Green et al. (2020) | Sample: n = 2,020 3-year old children and n = 1,295 4-year old children enrolled in 125 Head Start centers across the US Data Source: Early Head Start Research and Evaluation Project (EHSREP) Sample: Child welfare agency records for n = 2,794 children | Parent-reported parenting measures, spanking, family conflict scale | Early Head Start program enrollment (y/n) | Randomized Control Trial | Head Start parents provided more positive and supportive home environment, which reduced likelihood of maltreatment. Effects of Head Start on child maltreatment were observed if the program reduced family conflict and parental stress, increased warm and responsive parenting practices, and promoted healthy child socioemotional and cognitive development |
| Green et al. (2014) | Data Source: Early Head Start Research and Evaluation Project (EHSREP) Sample: 1,247 families with children categorized into 4 age groups (birth to middle school) | Frequency of substantiated maltreatment reports; Frequency of out-of-home placements; Maltreatment type of each substantiated report; based on administrative records | Early Head Start program enrollment (y/n) | Randomized Control Trial | EHS children less likely to have any welfare encounter in most of the program sites. EHS children less likely to have substantiated reports for physical or sexual abuse, but were more likely to have substantiated reported for neglect. |
| Pratt et al. (2015) | Data Source: Head Start Impact Study (HSIS) Sample: n = 4,442 children | Change in frequency of parent-reported spanking over two waves | Enrollment in Head Start (random assignment) | Randomized Control Trial | Head Start enrollment during school year related to decreased spanking for children, and marginal, positive effect from preschool-based involvement. |
| Love et al. (2005) | Data Source: Families from 17 research programs in urban and rural regions Sample: n = 3,001 families | Observed parenting behavior; Parent-reported corporal punishment (spanking) | Early Head Start involvement (random assignment) | Randomized Control Trial | Early Head Start parents less likely to report spanking in the previous week |
| Berlin et al. (2011) | Data Source: Early Head Start National Research and Evaluation Project Sample: n = 947 mothers from six sites of data source | Parent-reported frequency of spanking in the past week | Early Head Start participation; self-reported adult attachment | Randomized Control Trial | EHS reduced likelihood of spanking when mothers reported low baseline attachment anxiety |
| Magnuson & Waldfogel (2005) | Data Source: Early Childhood Longitudinal Study – Kindergarten Class Sample: 16,592 children and their parents | Parent-reported spanking behavior in the past week | Child's pre-school child care (center-based, relative care, Head Start), parent report | Quasi-experimental | Head Start attendance associated with higher probability of no spanking in two-parent families especially those highly disadvantaged. |
| Ansari et al. (2016) | Data Source: Head Start Impact Study Sample: Children and families eligible to be enrolled in Head | Parent-reported frequency of spanking in the past week | Child's enrollment in Head Start (random assignment) | Randomized Control Trial | Head Start parents who spanked their children at least twice a week exhibited greater reduction in spanking over time. |

(continued on next page)

Table 2 (continued)

| Citation | Sample (description, location, size) | Outcome studied (description of measure) | Independent variable (description of measure) | Study design | Main findings |
|---|--|---|--|--------------------------|---|
| | Start (n = 3,696) | | | | |
| <i>Parental Mental Health Outcomes</i> | | | | | |
| Ansari et al. (2016) | Data Source: Head Start Impact Study Sample: Children and families eligible to be enrolled in Head Start (n = 3,696) | Maternal Depression (CES-D) | Child's enrollment in Head Start (random assignment) | Randomized Control Trial | Head Start parents did not report fewer depression symptoms. |
| Chazen-Cohen et al. (2007) | Data Source: Early Head Start Research and Evaluation Project Sample: Families with children under age 1 (n = 3,001) | Maternal depression (CES-D) | Child's enrollment in Early Head Start (random assignment) | Randomized Control trial | EHS enrollment was associated with reduced child aggression at ages 2 and 3 and higher Bayley MDI scores at age 3, which mediated the relationship between EHS enrollment and reduced maternal depression at the pre-kindergarten follow-up. |
| Lee & Rispoli (2017) | Data Source: Head Start Impact Study Sample: Children and families eligible to be enrolled in Head Start for whom primary caregiver is birth mother, stepmother, or adoptive mother, n = 3,269 (971 Black, 1,086 Hispanic, 1,212 White mothers) | Maternal depression (CES-D) | Child's enrollment in Head Start (random assignment), race/ethnicity (self-report) | Randomized Control Trial | Head Start participation was not associated with maternal depression of any race or ethnicity |
| <i>Interpersonal Partner Violence (IPV)</i> | | | | | |
| Magnuson & Waldfogel (2005) | Data Source: Early Childhood Longitudinal Study – Kindergarten Class Sample: 16,592 children and their parents | IPV – parent report of how often the couple hits or throws things at each other while arguing (if ever, coded as IPV); parent-reported spanking behavior in the past week | Parent report of type of child's care during pre-school age (center-based, relative care, Head Start), parent report | Quasi-experimental | Head Start enrollment was associated with lower instances of IPV among low-income two-parent families. |
| <i>Work/Economic Outcomes</i> | | | | | |
| Sabol & Chase-Lansdale (2015) | Data Source: Head Start Impact Study Sample: Children and families eligible to be enrolled in Head Start, n = 2,161; control group children and families, n = 1,275 | Change in parent-reported employment status (y/n) | Child's enrollment in Head Start (random assignment) | Randomized Control Trial | Head Start participation not associated with parents who were not working at baseline moving to part- or full-time employment at a later point in time. |
| Scarborough et al. (2021) | Data source: American Community Surveys, 2006–2016 Sample: Families with children under 5 (1,540,486 total families) | Poverty growth during Great Recession by state; economic recovery after Great Recession by state | Percentage of children eligible to be enrolled in Head Start by state (2009–2011); percentage of eligible families enrolled in Head Start by State (2009–2011) | Associational | Head Start availability was related to less growth in family poverty by state. Head Start availability was associated with reduced poverty growth for all families, but the effect was significantly stronger for families who had young children. Low Head Start enrollment rates were associated with slower recovery than high Head Start enrollment states. |

to both positive and negative outcomes related to child maltreatment: while Early Health Start children were less likely to have a substantiated report of physical abuse, they were also more likely to have a substantiated report of neglect (Green et al., 2014). Two studies found that Head Start participation was not predictive of any child maltreatment outcomes but found indirect effects through related mediating pathways. Specifically, parent involvement in Head Start was associated with subsequent reduction in controlling behavior (Ansari & Gershoff, 2016) and increase in supportive parenting and home environment (Green et al., 2020), which in turn were predictive of reported use of physical punishment.

Child maltreatment was measured in three different ways in the identified articles. Most of the identified studies utilized parent-report questions to assess use of physical punishment (Ansari et al., 2016; Ansari & Gershoff, 2016; Berlin et al., 2011; Green et al., 2020; R. Lee et al., 2014; Love et al., 2005; Magnuson & Waldfogel, 2005; Pratt et al., 2015). One study examined both abuse and neglect using a validated

measure of child maltreatment, the PC-CTS (Zhai et al., 2013). Two studies examined instances of child maltreatment that include both abuse and neglect: one examined foster care placement as result of maltreatment report (Klein et al., 2017) and another examined substantiated reports of child maltreatment using administrative records (Green et al., 2014).

The reviewed articles recruited Head Start families from a wide range of samples: three studies examined Head Start participation related to child maltreatment using subsamples of the EHS Research and Evaluation Project database (EHSREP) (Berlin et al., 2011; Green et al., 2014, 2020); two studies utilized data collected from the Early Childhood Longitudinal Study Birth Cohort (ECLS-B) (R. Lee et al., 2014) and Kindergarten Class (ECLS-K) (Magnuson & Waldfogel, 2005); two studies utilized data from Head Start Impact Study (HSIS) (Ansari et al., 2016; Pratt et al., 2015); one study used the Fragile Families and Child Wellbeing Study (FFCWS) data (Zhai et al., 2013); one used the National Survey of Child and Adolescent Well-Being (NSCAW-II) (Klein et al.,

2017); one utilized data from the Family and Child Experiences Survey (FACES) (Ansari & Gershoff, 2016); and one study recruited their own sample from multiple research programs located in both urban and suburban US regions (Love et al., 2005).

We identified only one study that examined the associations between Head Start and IPV, which found a small reduction in reported IPV for Head Start-enrolled families (Magnuson & Waldfogel, 2005). Furthermore, the authors found greater IPV reduction for low-income, two-parent families enrolled in Head Start as compared to two-parent families (2.3 percentage point vs 1.1 percentage decrease in IPV). Data were taken from the Early Childhood Longitudinal Study, Kindergarten Class, and IPV was measured via parent reported violent behavior during disagreements and arguments. Early care and education were measured by parent report and coded as center-based, Head Start, relative care, or non-relative care. For parents who reported a combination, any reports of Head Start were coded as Head Start.

3.6. Head Start/Early Head Start and family violence risk factors

Two studies examined the impact of Head Start on maternal depression (Ansari et al., 2016; K. Lee & Rispoli, 2017) and one study examined the impact of EHS on maternal depression (Chazan-Cohen et al., 2007). The former studies did not find impacts of Head Start on maternal depression within a several months (Ansari et al., 2016) to two-year follow-up (Lee & Rispoli, 2017). However, Chazan-Cohen and colleagues (2007) found that EHS had a modest but statistically significant impact on decreased maternal depressive symptomology at the pre-kindergarten follow up. While more research is needed to further elucidate the relationship between EHS participation and maternal depression, this study suggests a complex relationship in which EHS's impact on children and families is not fully understood until years after the program has ended.

We identified one article that examined the impacts of Head Start on poverty (Scarborough et al., 2021). The study sought to determine if Head Start availability at the state level impacted both the rise of poverty during the Great Recession and the decline in poverty in the recovery years. Analyzing American Community Survey data from 2006 to 2016, Scarborough and colleagues (2021) determined that states with greater Head Start availability saw smaller increases in family poverty during the Great Recession. Availability of Head Start positively impacted all families, but families with Head Start-eligible children saw a much stronger benefit. The authors also found that states with higher percentages of Head Start enrollment had lower levels of family poverty by 2016 compared to low-enrollment states, whereas in 2009, Head Start enrollment did not predict family poverty by state. While more research is necessary, this study suggests that Head Start availability and enrollment may reduce family poverty and support economic growth.

Only one identified study examined the impact of Head Start on parental employment (Sabol & Chase-Lansdale, 2016), which found mixed results. There was no main effect of Head Start on employment when parents who were in school or training were considered as employed; however, when these parents were considered as unemployed, Head Start participation was found to increase employment three years later. Whilst it is unclear if the effects were driven by measurement differences, the study provides initial support for future investigations on the impact of Head Start on long-term employment. The study used a sub-sample of Head Start Impact Study (HSIS) families and data were collected annually from enrollment through first grades. Parental employment was measured by caregiver survey on their employment status (e.g., working full time, part time, military, looking for employment, laid off, etc.).

3.7. Universal Pre-K

Our search strategy did not yield any empirical articles examining universal pre-K and our family violence outcomes or related risk factors.

Despite our search results, which primarily focused on peer-review journal articles, we are aware that there are publicly available reports on the impact or projected impact of universal pre-K on child maltreatment. Systematically locating all these reports is beyond the scope of the current paper, as we were focused on peer-reviewed published literature. A small set of policy report findings suggest the positive role universal pre-K programs can play in reducing child maltreatment (Karoly & Bigelow, 2005; Lynch & Vaghul, 2015; Sandner & Thomsen, 2018). For example, in Germany, it was found that increasing the number of childcare slots above the median was related to a decrease of 0.24 child protection cases per 1,000 children (Sandner & Thomsen, 2018). A national U.S. policy analysis estimated that if universal pre-K were to be instituted across the country, there would be significant decreases in child maltreatment and child welfare spending (Lynch & Vaghul, 2015). Relatedly, a policy simulation in the State of California estimated that there would be 4,500 fewer substantiated cases of abuse and neglect annually with universal pre-K (Karoly & Bigelow, 2005). No similar reports were found for IPV as the outcome.

4. Discussion

To date, we know little about the effects early childhood education policies on reducing family violence and related risk factors. This rapid review aimed to understand the evidence base of the relationships between early childhood education policies—childcare subsidy, Head Start/EHS, and universal pre-K—and two family violence outcomes: child maltreatment and intimate partner violence. This study makes an important contribution to the literature by demonstrating that (a) few studies have investigated the associations between early childhood education and care policies and family violence outcomes; (b) there was generally weak causal evidence of examined studies with only a small number exceptions, especially within the domain of HeadStart/EHS; and (c) although early childhood care and education policies hold promise as a violence prevention strategy, additional research—especially with more robust research designs—and policy considerations (e.g., cost offsets of early childhood care and education policies) are needed. The fact that we found only two dozen studies on childcare subsidy, 15 studies on Head Start/EHS, and no study on universal pre-K pertaining to family violence across a span of more than two decades suggests the limited attention this topic (i.e., early childhood care and education policies as a mean to prevent child maltreatment and its risk factors) has received in the literature. The lack of studies in the area of universal pre-K is particularly concerning, given the policy's potential to reach children and families who are not currently eligible for Head Start or childcare subsidy and the potential for even moderate reductions in risk factors like parental stress, labor force participation, and parental mental health to have major impacts on family violence for these lower-risk families.

Concerning the strength of evidence, especially causal evidence, the vast majority (73 % or 29 out of 40 studies) of the studies were tests of associations (e.g., regressions) and thus their findings do not allow for making causal inferences about the effects of early childhood care and education policies on family violence prevention. That said, several exceptions were present. For example, one childcare subsidies study used structural equation modeling (SEM) to examine the mechanism (i.e., working hours, household income) by which childcare subsidy receipt was linked with decreases in physical abuse report risk (Yang, Maguire-Jack, Showalter, Kim, & Slack, 2019), and one childcare subsidy studies also used SEM to investigate the processes by which childcare subsidy receipt was associated with the extent to which parents worked (e.g., part-time, full-time) (Marshall, 2013). Because SEM evaluates whether a specified model fits the data well by its ability to reproduce all pairwise associations in the sample data, failure to do so leads to doubts about causal assumptions between variables of interest (Bollen & Pearl, 2013). Although fitting the data within an SEM framework cannot prove any causal assumptions, it does make causal

assumptions more—but tentatively—plausible (Bollen & Pearl, 2013). In light of this, some of the more robust evidence available seem to point to childcare subsidy's positive effects on improved parental work.

Importantly, within the domain of Head Start/EHS, two studies employed SEM to examine mechanisms underlying Head Start and child maltreatment risk (Ansari & Gershoff, 2016; Green et al., 2020), one study used a quasi-experimental research design to examine the effects of Head Start enrollment and IPV likelihood (Magnuson & Waldfogel, 2005), and four studies conducted randomized controlled trials (RCTs) to examine the effects of Head Start/EHS on parental depression (Ansari et al., 2016; Chazen-Cohen et al., 2007; Lee & Rispoli, 2017) and parental employment (Sabol & Chase-Lansdale, 2015). The use of experimental study designs such as RCTs allow for prospective data collection, reduces bias, and serves as rigorous tools for examining cause and effect relations between interventions and outcomes of interest (Hariton & Locascio, 2018). In particular, randomization within RCTs allows for balancing participants' observed and unobserved characteristics across groups, and therefore, any group differences in outcomes would be attributable to the study interventions (Hariton & Locascio, 2018). With this in mind, while several Head Start/EHS studies employed RCTs and thus were expected to yield some of the more robust evidence in the literature, the fact that many were null findings (e.g., no significant effects of Head Start on parental depression or employment) questions Head Start as a potential tool to reduce parental risk factors linked with family violence.

4.1. Recommendations for future research

Specifically, there was emerging evidence suggesting that policies related to childcare subsidies and Head Start may be promising in mitigating child maltreatment. Different mechanisms may be at play though, with the literature providing the most evidence base for the positive links between childcare subsidies and families' employment related outcomes, including work and income. That is, childcare subsidies could be reducing child maltreatment via helping families meet their basic needs, though future research should directly test these links. There was some evidence pointing to the associations between Head Start and improved parenting behaviors, suggesting that this may be a mechanism by which Head Start may be reducing child abuse. We did not find any peer-reviewed studies investigating the role of universal pre-K in reducing child maltreatment although there are policy reports pointing to its potential to do so. These findings suggest the need for future research to examine universal pre-K and its association with child maltreatment and its risk factors.

The policies and programs reviewed in this rapid review have the potential to support families and prevent children from experiencing maltreatment and parents from experiencing IPV, even though additional research, especially those utilizing rigorous study designs (e.g., RCTs), is critically needed to more precisely understand the violence-prevention effects of these programs (Table 3). Most of the studies included in this review did not examine the links between early childhood education and care policies and IPV, potentially because child-related programs may have less of an effect on IPV at a population level since not every-one experiencing IPV has children. Given that IPV and child maltreatment often co-occur though, it will be important for future research to investigate whether early childhood education and care policies reduce child abuse and neglect in addition to IPV within the same families.

In addition to more attention to the topic of early childhood education and care policies and family violence, future research should endeavor to use consistent definitions for early childhood education and care policies and program implementation, family violence outcomes, and their risk factors. Other recommendations include the use of neglect and its subtypes (e.g., physical neglect, supervisory neglect) as key measures of child maltreatment alongside child abuse, as well as employing IPV as a co-occurring family violence outcome. Related to

Table 3
Implications for practice, policy, and research.

| | Policy | Research | Practice |
|-------------------|---|--|--|
| Childcare subsidy | Childcare subsidies should be expanded to more groups and with higher benefit levels. | Research is needed to examine the population-level impact of childcare subsidy on family violence. | Practitioners should assist working parents in securing high quality early childhood education and care. |
| HeadStart | Increased funding is needed to enroll all eligible families into HeadStart. Programs should be expanded and made accessible to more groups. | Research is needed to understand the impact of HeadStart on neglect specifically. | |
| Universal pre-K | The limited research suggests that provision of universal pre-K across the United States would be beneficial for child and family outcomes. | More research is needed on the impacts of universal pre-K on family violence. | |

this point is the additional need to use validated measures of family violence in future research. Many of the outcomes in the current review were risk factors associated with family violence rather than direct measures of family violence, and thus it is unclear whether the risk factors serve as mediators. As noted above, specific pathways linking early childhood education and care policies and family violence outcomes should be tested, and Fig. 1 could provide a helpful framework for future research in this area. This also points to the need for more rigorous and varied study designs, including experimental studies with intervention and control groups, that will allow for more rigorous examination of the impact of early childhood education and care policies on family violence and to employ policy analysis methods that explore the different effects of these policies and their implemented programs.

There was some evidence that early childhood care and education policies, especially Head Start/EHS, may be differentially associated with outcomes of interest for some groups. For example, a number of Head Start/EHS studies demonstrated that Head Start was linked with greater probability of no spanking and reductions in IPV likelihood amongst families with low income (Magnuson & Waldfogel, 2006), as well as slower poverty growth for families with young children (Scarborough et al., 2021). Relatedly, EHS was linked with reduced likelihood to spank, especially for mothers with low attachment anxiety (Berlin et al., 2011). That is, the evidence suggests that Head Start/EHS may be particularly helpful for reducing family violence and its risk factors within families facing high socioeconomic disadvantage, caring for young children, and those in which mothers exhibit low levels of attachment related anxiety (e.g., possibly suggests mothers' trust, receptiveness of intervention, or mental health). Importantly, although our findings suggest that these groups would most benefit from Head Start/EHS, prior reports have called attention to the inequities and disparities in Head Start funding and administration (i.e., level of funding, quality of program, amount of instruction, access to programs that vary widely across states) (Barnett & Friedman-Krauss, 2016; Heim, 2016). Head Start programs nationwide serve less than 20 % of 3- to 4-year-olds from low-income contexts, enrollment varies immensely from 7 % (i.e., Nevada) to 52 % (i.e., Mississippi) for such children, and highest funded state (i.e., Alaska) after adjusting for cost of living received two times as much funding per enrolled child (\$10,995) compared to the lowest funded state (i.e., District of Columbia at \$5,507) (Barnett & Friedman-Krauss, 2016). There is a need to expand Head Start funding nationwide, as well as ensure resources are directed to some of the most poorly funded states. This way all eligible

children—especially those who are from low-income contexts and younger in age—have equal access and opportunity to attend high quality Head Start/EHS (Heim, 2016). In conclusion, while there is some preliminary evidence that early childhood education and care policies may be associated with reductions in family violence, especially child maltreatment and its risk factors, additional research with consistent definitions of such policies, validated family violence measures, and more rigorous study designs are needed to strengthen the evidence base in this area with equity considerations in mind.

4.2. Limitations

Before discussing the implications of this rapid review, it is critical to acknowledge that there are several limitations to the current study. The current study focused on empirical peer-reviewed, published research that were identified when searching three academic databases, JSTOR, Web of Science, and Academic Search Complete. The search procedures would not identify articles that are not empirical or published within the peer-reviewed literature. As a result, any biases inherent in the publication process will be present within the current review. For example, publication bias refers to the phenomenon that published studies are more likely to report statistically significant results, as studies with null results are believed to be less likely to be published and therefore are also less likely to be submitted for consideration. Additionally, although we attempted to be broad in our selection of academic literature databases, it is possible that some peer-reviewed studies did not appear in our searches. Finally, we opted to conduct a rapid review to quickly pull together research findings surrounding early childhood education due to the policy opportunity surrounding childcare because of the COVID-19 pandemic. A meta-analysis would have allowed for estimating the pooled estimate of the impacts of such programs, while the rapid review does not allow for such quantified estimates.

4.3. Early Childhood Education and Care Policy Implications

Early childhood education and care policies have important positive outcomes for families. The studies included in this review have shown such policies are linked with improved parental work and mental health and lower levels of parental stress, as well as have the potential to reduce family violence. Child maltreatment has substantially immediate and distal human and societal costs. For example, using the number of maltreated children in 2015, Peterson and colleagues (2018) calculated the lifetime economic burden of child abuse and neglect to be nearly \$2 trillion. They also suggested that child maltreatment prevention may result in a significant reduction in economic burden in the U.S. population in addition to improving the health and safety of children and families.

Importantly, policy efforts could support the expansion or full funding universal pre-K programs, which are currently significantly underfunded. Relatedly, few states can enroll all eligible Head Start children because of insufficient funding, which limits the potential positive impact of this program on not only children's early school readiness but also their safety, protection, and wellbeing. Similarly, childcare subsidies are not a guaranteed benefit and eligible families may be unable to enroll in the program because of limited funds.

Expansion of funding is needed for these early childhood education and care programs. To aid these policy efforts, research can better help understand whether there are positive externalities related to child maltreatment for childcare subsidies, Head Start, and universal pre-K. As these policies are reviewed and funded, including the savings from reductions in family violence, it would be important to communicate with policymakers the extent to which such early childhood education and care policies could result in a substantial cost offset to the expenses of these programs.

Although our focus has been highlighting early childhood education and care as a violence prevention strategy, we are mindful that other

policy and programmatic efforts, such as direct cash payments to parents, may be equally effective in reducing family violence. For example, the Baby's First Years study, a randomized controlled trial examining the causal impact of monthly unconditional cash transfer on brain activity amongst infants from families with low income, showed recently that direct cash transfers to mothers were directly linked with positive changes in infant's brain activity linked with subsequent cognitive development (Troller-Renfree et al., 2022). Although the researchers did not directly examine the effects of cash transfers on family violence outcomes, it is plausible that increased household income which directly benefited infants' development also alleviated some of the economic stress and material hardship mothers faced—risk factors associated with child maltreatment (Conrad-Hiebner & Byram, 2020). Relatedly, a substantial body of evidence suggests that public benefits—cash, vouchers, and food transfers—may be linked with reductions in IPV (Buller et al., 2018; Hidrobo et al., 2016).

Clearly, there is a trade-off between funding early childhood education and care programs and more general programs that serve a wider group of families. That is, programs for children are likely to only benefit families with children but may have a larger impact on child maltreatment—a costly and detrimental form of family violence. On the other hand, more general public support programs, such as direct cash transfers, can benefit more families, including those without children, albeit potentially not having the same impact on violence prevention and thereby reducing the long-term cost savings that comes from prevention of child maltreatment. It would be important for policymakers to know which types of public policies and subsequent investments in relevant programs have the highest impact on preventing family violence or which programs are most effective in reducing different types of family violence (e.g., child subsidies for child maltreatment, cash transfers for IPV).

In conclusion, policy efforts to allocate additional funding to expand early childhood education and care programs are needed. Furthermore, there is a need to better understand how early childhood education and care policies might complement and work alongside other public policies that could curb family violence in its multiple forms. More broadly, there is a critical need to demonstrate to policymakers the role of family violence prevention in significantly reducing the economic burden on the American government and its people—specifically in the form of early childhood education and care investments.

5. Conclusion

The goal of the current study was to conduct a rapid review to examine the evidence base concerning the relationships between three early childhood education and care policies—childcare subsidies, Head Start/EHS, and universal pre-K) and two family violence outcomes, including child maltreatment and IPV. There were few studies that have examined these relationships, although those that have done so especially using rigorous methods suggested promising evidence to support some of the early childhood education and care policies as a strategy for preventing family violence (e.g., childcare subsidies and Head Start and their associations with lower levels of child maltreatment risk). We recommend future research using more consistent definitions of early childhood education and care policies, validated measures of family violence, and rigorous research designs (including experimental studies and those that examine the extent to which such policies help reduce economic burden of family violence), as well as policy efforts to further invest in early childhood education and care programs a means to preventing violence against children and other forms of violence withing families.

CRedit authorship contribution statement

Kathryn Maguire-Jack: Conceptualization, Methodology, Formal analysis, Investigation, Writing – original draft, Writing – review &

editing, Supervision. **Felicia Hardi:** Methodology, Formal analysis, Investigation, Writing – original draft, Writing – review & editing. **Bri Stormer:** Methodology, Formal analysis, Investigation, Writing – original draft, Writing – review & editing. **Joyce Y. Lee:** Writing – original draft, Writing – review & editing. **Megan Feely:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing. **Whitney Rostad:** Writing – original draft, Writing – review & editing. **Derek C. Ford:** Writing – original draft, Writing – review & editing. **Melissa T. Merrick:** Conceptualization, Writing – review & editing, Supervision, Project administration, Funding acquisition. **Catherine A. Murphy:** Writing – review & editing, Supervision, Project administration. **J. Bart. Klika:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing, Supervision, Project administration, Funding acquisition.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

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