This paper was commissioned for the Committee on Policies and Programs to Reduce Intergenerational Poverty, whose work was supported by contracts between the National Academy of Sciences and the Administration for Children and Families, a division of the U.S. Department of Health and Human Services, Bainum Family Foundation, Doris Duke Foundation, Foundation for Child Development, National Academy of Sciences W.K. Kellogg Fund, Russell Sage Foundation, and W.K. Kellogg Foundation. Opinions and statements included in the paper are solely those of the individual authors, and are not necessarily adopted, endorsed, or verified as accurate by the Committee on Policies and Programs to Reduce Intergenerational Poverty or the National Academies of Sciences, Engineering, and Medicine.

Background Paper on Child Welfare Involvement and Intergenerational Poverty Margaret Thomas, Lawrence M. Berger, Brenda Jones Harden, Jane Waldfogel

Abstract

Child welfare involvement is disproportionately concentrated among low-income children and among families who face other forms of marginalization, including racially minoritized status, that are further associated with economic disadvantage. Because of these confounding risks, evidence on the independent effects of child welfare involvement on intergenerational poverty is not definitive. In this review, we distinguish between the limited *causal* evidence about the effects of child welfare involvement on later-life economic outcomes and the larger body of *descriptive* evidence about correlations between child welfare involvement and later-life outcomes. We examine a range of specific policies that may be effective in reducing child maltreatment and child welfare involvement and, thereby, improving later economic wellbeing through impacts on intermediate outcomes such as adolescent and young adult socioeconomic outcomes. We find suggestive evidence that several policies or programs may reduce risks for child maltreatment, including tax-based direct income transfers for low-income families, select home visiting programs, and one specific community-focused intervention.

Introduction

Involvement with the child welfare system is surprisingly common in the United States. In 2020, the most recent year for which federal data are available (Administration for Children and Families, 2022a), approximately 7.1 million children were reported to child protective services (CPS) and about 3.1 million children were investigated or assessed by CPS. Most children who are referred to the system are not removed from home, but nevertheless, in 2020 approximately 407,000 children were in out-of-home care. Of course, these point-in-time estimates understate the lifetime risk of involvement. The most recent cumulative estimates suggest that, by the time they turn 18, 37.4% of children will have some involvement with the child welfare system (Kim et al., 2017), and 5.9% of children will have experienced out-of-home placement (Wildeman & Emanuel, 2014).

Children who are involved with the child welfare system disproportionately come from economically disadvantaged families (Administration for Children and Families, 2022a; Eckenrode et al., 2014; Pelton, 2015; Putnam-Hornstein et al., 2021) and are at elevated risk of

poverty and other adverse outcomes in adulthood (Bunting et al., 2018; Currie & Widom, 2010; Mersky & Topitzes, 2010). Hence, they are, by definition, a group at high risk of intergenerational poverty; however, it is not clear to what extent maltreatment and child welfare involvement are important drivers of intergenerational poverty, or whether these children's elevated risk mainly reflects other factors that are correlated with both child welfare involvement and adult poverty.

Involvement with the child welfare system is also marked by pronounced racial/ethnic disparities, as we discuss below (see e.g. Kim, Wildeman, Jonson-Reid, & Drake, 2017). For example, half of Black children will have involvement with the child welfare system during their childhoods (Kim et al., 2017); the rate of involvement is also elevated for Hispanic children (Kim et al., 2017). Disparities by race and ethnicity are strongly linked with inequities in exposure to poverty and hardship (Kim & Drake, 2018; Thomas & Waldfogel, 2022), reflecting consequences of structural racism which shapes economic as well as family circumstances. Additionally, empirical evidence suggests that persistent individual-level racial bias among actors within the child welfare system may additionally expose Black, Native American, and Hispanic children to greater child welfare involvement (Dettlaff et al., 2011; Font et al., 2012). Thus, it is important to consider to what extent the consequences of maltreatment and child welfare involvement differ by race/ethnicity.

We begin this paper by reviewing the best evidence on the links between childhood maltreatment and child welfare involvement and adult poverty-related outcomes and how those links vary by race/ethnicity. We next review what is known about the factors that place children at risk of child maltreatment and child welfare system involvement. Finally, we evaluate the evidence on effective policies and programs to reduce child maltreatment and child welfare system involvement and their potential implications for reductions in intergenerational poverty.

I. What is the evidence that maltreatment and child welfare involvement are important drivers of intergenerational poverty?

Descriptive evidence that children who have been maltreated or involved with the child welfare system have worse outcomes as adults

A large literature provides descriptive evidence that children who are abused, neglected, and/or involved with child welfare systems have worse outcomes in adulthood than their non-maltreated or non-child welfare-involved peers. Typically, such studies attempt to address selection by controlling for observable characteristics, leaving open the question of selection on unobserved characteristics (Child Welfare Information Gateway, 2019).

In general, these descriptive studies find childhood abuse or neglect is linked with poorer adult outcomes. For example, Bunting et al.'s (2018) review concluded that maltreatment in childhood is related to adverse economic outcomes, such as economic inactivity and income reductions, beyond the contribution of poverty-related risk (e.g., maternal education, welfare receipt during childhood). Examining intergenerational income mobility and child maltreatment, Bullinger et al. (2022) found that children residing in counties with lower child maltreatment report rates had a better chance of income mobility than those in counties with higher maltreatment rates.

Zielinski (2009) found that adults who had experienced maltreatment as children had lower incomes, elevated utilization of Medicaid, and higher rates of unemployment than those without maltreatment experiences. Notably, adults who had histories of multiple types of maltreatment were three times as likely as those who had not experienced maltreatment to live in poverty. Using data from the National Survey of Child and Adolescent Well-being (NSCAW-II) (a nationally representative study of children in the child welfare system, Casanueva et al. (2014) found that 15% of youth who had been maltreated were "disconnected" from school or work.

Mental health problems are an important driver of intergenerational poverty (Jones Harden & Slopen, 2022; Yoshikawa et al., 2012). There is a substantial literature on the linkage between history of maltreatment and later mental health challenges (Edwards et al., 2003; Jaffee et al., 2013; Negriff, 2020). For example, Jonson-Reid et al. (2009) found higher rates of receiving mental health services for maltreated children who were low-income than their non-maltreated counterparts. The authors' analyses of the data also suggested that children of color who were maltreated were less likely to have obtained mental health services than white youth who were maltreated, suggesting racial disparities in mental health service receipt that may have implications for long-term outcomes for children of color.

Causal evidence that children who have been maltreated or involved with the child welfare system have worse outcomes as adults

A small number of studies have used more rigorous methods to compare maltreated children with other children who are most similar to them. For example, Currie and Widom (2010) used a case-control design and found that children who were determined to be abused or neglected had lower levels of education, employment, earnings, and assets as adults. Currie and Tekin (2012) used propensity score matching and twin fixed effects and found that children who were abused or neglected were much more likely to be involved in crime as adults (which, in turn, has implications for intergenerational poverty, given the robust relations found between poverty and juvenile delinquency (Birckhead, 2012), as well as incarceration (DeFina & Hannon, 2013)).

Font and Maguire-Jack (2020a) compared children who were reported to CPS – 90 percent of whose families received SNAP – to a comparison group of children whose families received SNAP but were not reported to CPS. Specifically, they examined four groups: children reported for abuse only (AO); neglect only (NO); both abuse and neglect (AN); or not reported (NM). Importantly, their study excluded children who were placed into foster care or group care, such that their estimates are relevant to the majority of child-welfare-involved children who do not experience out-of-home care. (The large literature that focuses specifically on foster care or group care is discussed separately below). They found that youth reported to CPS have "substantially worse outcomes – lower rates of high school graduation and regular employment, and higher rates of teen parenthood and incarceration – than youth without maltreatment allegations who were exposed to similar duration and depth of poverty" (p. 9).¹

¹ Specifically, with regard to high school graduation: "Among those with average (sample mean) poverty duration and depth, the predicted probability of high school graduation for NM youth was .83, about 7 percentage points (PP) higher than for NO and AO youth (p<.001), and 14PP higher than AN youth (p<.001). In comparison, the difference in probability of high school graduation for NM youth with high versus average poverty exposure was 5PP, statistically significantly smaller than differences associated with neglect only, abuse only, or combined abuse and

As the authors acknowledge, there may be omitted factors they could not control for that are associated both with being reported to CPS and with young adult outcomes.² Nevertheless, their study confirms that low-income children involved with the child welfare system are at elevated risk of poor mobility-related outcomes in young adulthood, making them a group at high risk of intergenerational poverty.³

Evidence on whether links between maltreatment or child welfare involvement and later outcomes vary by race or ethnicity

Some research suggests that associations between maltreatment or child welfare involvement and later outcomes vary by race/ethnicity. For example, in a large study of children in Mississippi (n=30,000), Yoon et al. (2021) documented that children who were reported for maltreatment and thus had child welfare system involvement had worse educational outcomes than those who were not, specifically with respect to grade retention and chronic absenteeism. Further, they found that Black male children who were involved in the child welfare system had worse educational outcomes than White males or Black or White females with child welfare system involvement. Further, Mersky and Topitzes (2010) analyzed data from the Chicago Longitudinal Study, which included 1,539 minority children (93% African American; 7% Hispanic) from economically disadvantaged backgrounds and found that children with substantiated reports of maltreatment had an increased likelihood of adverse education and employment outcomes during early adulthood.⁴

Causal evidence on outcomes for children who were placed in out-of-home care

There is a large descriptive literature on children who are removed from their homes and placed into some form of out-of-home care. These children are a small share of those who experience maltreatment or child welfare involvement, but they are a very important group, as their families tend to be the most disadvantaged and the children themselves tend to face numerous challenges in adulthood.⁵ However, as with research on the child welfare population more generally, the challenge in this research is to estimate the causal effects of out-of-home placement as distinct from the effects of factors that precipitated the placement. For that reason, we do not discuss the many descriptive studies and instead focus on the studies that have used plausibly causal methods.

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neglect. That is, the decrease in probability of high school graduation associated with a CPS investigation is greater than the decrease associated with spending an additional 4.8 years in poverty" (p. 7-9).

² A study by Font, Cancian, and Berger (2019) – using similar data and methods to examine associations between child welfare involvement and early childbearing (an important risk factor for poverty) – concludes that, although children who have been involved with child welfare or in foster care have higher odds of early motherhood, this association is not causal but rather due to other factors that differ between these youth and their non-child-welfare involved peers.

³ Using similar data and methods, Font, Cancian, Berger, and DiGiovanni (2021) show that child welfare involvement persists across generations.

⁴ Specifically, they found reduced high school graduation (53.7% vs. 37.2%), less employment or college attendance (53.0% vs. 41.0%), and increased history of arrest (36.3% vs. 48.0%).

⁵ Another important, and very disadvantaged, group is youth who are involved with both the child welfare and juvenile justice systems, who may be placed out of home by both systems (Herz et al., 2012; Hirsch et al., 2018).

A series of studies have used variation in investigator propensity to remove children as an instrument to identify the causal effect of out-of-home placement on later outcomes (taking advantage of the fact that assignment to investigators is usually based on their availability rather than characteristics of the case). It is important to note that these studies provide evidence as to the effect of placement on a child who is at the margin between being removed or not – they are not informative as to the effect of placement on children whose circumstances at home are so severe that they would prompt placement regardless of the individual investigator or judge. Doyle (2007, 2008), who originated this method, provides evidence on outcomes for children removed from home between ages 5 and 13, using data from Illinois. He finds that removal leads to increased delinquency and arrests and reduced labor force participation.

Bald et al. (2022) used this method with administrative data from Rhode Island to study outcomes for children who were investigated by CPS before the age of 6. They found that removal leads to significantly higher test scores (an average gain of 1.4 standard deviations in math and reading) and significantly reduced grade repetition (an average reduction of 42.6 percentage points) for girls, with no significant effects for boys (although they caution that they cannot rule out positive or negative effects). The authors also examined outcomes for children removed at age 6 or later and, in contrast to their results for children removed at younger ages, found no significant effects for girls or boys, with some non-significant negative results on educational outcomes for boys.

Baron and Gross (2022) used this method with administrative data from Michigan to study the effect of removal on crime. They found foster care placement reduced adult arrests, convictions, and incarceration. Gross and Baron (2022), in a similar study, found that foster care placement led to improved safety and educational outcomes.

Thus, the evidence is mixed as to how removal affects later outcomes for child-welfare involved youth at the margin of remaining home or being placed. Bald et al.'s results suggest removal is beneficial for young girls but with less clear consequences for young boys. The picture with regard to removal of older children is less positive, with Doyle (2007, 2008) finding negative effects and Bald et al. finding unclear effects, but with a suggestion of negative effects for boys. However, recent research from Michigan (Baron and Gross, 2022; Gross and Baron, 2022) suggests positive effects. It is important to note that these studies draw on data from only three states and from different time periods, an important caveat given that the effects of removal could vary by state and over time, depending on the quality and composition of child welfare services and other contextual factors. For example, the likelihood that a child (all else equal) or that particular types of children (e.g., based on sociodemographic and/or case characteristics) will be removed in a given state and period may vary considerably by factors such as whether there has been a recent high profile child welfare case (e.g., death), whether the state is under court mandate(s) or supervision, and the capacity, service availability, and quality of preventive and child welfare system services available, potentially including the size and composition of out-of-home placement slots.

More generally, it is probably overly simplistic to estimate a single effect of child welfare involvement or removal, since the effects on wellbeing likely vary by the types and quality services provided, severity of maltreatment experienced, and length, stability, and type of out-of-

home placement, as well as child and provider characteristics. Unfortunately, these issues have not been subject to rigorous examination. In addition, it is possible that the 'impact' of out-of-home placement may differ by race and ethnicity if, for example, thresholds for removal (chronicity and/or severity of exposure to maltreatment), services received, types or quality of placements, or 'match' with placement settings and contexts (e.g., neighborhoods, schools) differ by race/ethnicity. Yet, the empirical research to date has not established the extent to which the effects of removal vary by race/ethnicity. Doyle provides separate estimates for non-white youth, but these constitute the bulk of his sample and, thus not surprisingly the estimates are similar to those for the full sample. Bald et al. do not provide separate estimates by race/ethnicity.

Descriptive evidence on outcomes for adolescents aging out of out-of-home care

Research using the National Survey of Child and Adolescent Well-being (NSCAW) to examine outcomes of young adults who had been in foster care as adolescents (Administration for Children and Families, 2008) indicates that over 40% lived in households with incomes less than the federal poverty threshold, which exceeds the proportion of youth living in poverty in the general population. Further, while the authors found no differences by race/ethnicity, they did find that female young adults were more likely to be living in poverty than males. They also documented that the employment level (approximately 58% working full- or part-time) of young adults who had been in foster care was similar to that of the larger population of young adults.

In a more refined analysis of the NSCAW sample, Southerland et al. (2009) compared child welfare-involved youth to youth from the general population. They documented that youth who had a history of child welfare involvement were twice as likely to experience mental health problems and economic hardship and four times as likely to be a parent. Differences by race/ethnicity were not reported.

In a study comparing economic outcomes for Black, white, Latinx, and Native youth, Watt and Kim (2019) analyzed data on youth aging out of care (n=9342) from the National Youth in Transition Database (NYTD). They found that Black youth were 36% more likely to enroll in higher education but were less likely to be employed than white youth. White and Latinx youth had similar outcomes, and American Indian/Alaska Native youth displayed worse outcomes than youth from other racial/ethnic groups.

Other research examines differences in involvement in the criminal justice system, which is further related to economic outcomes (Birckhead, 2012; DeFina & Hannon, 2013). Although the data are variable regarding disparities in educational and employment outcomes among youth from minoritized backgrounds, there is considerable evidence that Black youth who have been in foster care have a much higher likelihood of involvement in the criminal justice system (Barth et al., 2010; Jonson-Reid et al., 2009; Ryan et al., 2016; Watt & Kim, 2019). Similarly, Black and white male youth who have been in kinship care have also been found to be at increased risk of delinquency, whereas Hispanic males in kinship care were at reduced risk of delinquency (Ryan et al., 2010).

Although few studies have examined long-term outcomes for young adults who have been in foster care by placement type, there is some evidence that placement in kinship care (vs.

placement with unrelated foster parents) confers benefits for children from minority backgrounds (who represent the largest group of children in kinship care), such as increased placement stability, safety, and child wellbeing (Gleeson, 2012; Winokur et al., 2018). At the same time, however, other research suggests that the lower socioeconomic status of kinship care parents (e.g., poverty, food insecurity, reduced receipt of foster care payments; Fuller-Thomson & Minkler, 2000; Miller-Cribbs & Farber, 2008; Taylor et al., 2020) potentially contributes to the poverty rates found among young adults who have been in the foster/kinship care system (Harris & Skyles, 2008; Miller-Cribbs & Farber, 2008).

The evidence on the long-term poverty-associated outcomes for youth who have experienced kinship care is limited and ambiguous. Some studies document increased mental health challenges (Bramlett et al., 2017; Rufa & Fowler, 2016), whereas others point to enhanced mental health outcomes (Ehrle & Geen, 2002; Gleeson, 2012; Winokur et al., 2018). Similarly, some research suggests that kinship care is associated with criminal justice involvement for youth (e.g., Ryan et al., 2010) while other research documents that kinship care may protect youth from criminal justice involvement (e.g., Cutuli et al., 2016, Winokur et al., 2008). There is a clear need for more research in this arena, particularly concerning what family factors (e.g., poverty, service utilization) contribute to these conflicting outcomes (Coleman & Wu, 2016; Xu et al., 2021).

A recent meta-analysis by Kennedy, Potter, and Font (2022) finds that associations between having been in foster care and lower employment and financial stability in adulthood in the descriptive literature tend to be larger for Black youth than for white youth, although the reverse is true for associations with poor mental health; associations between foster care and educational achievement tend not to differ by race.

In their review of outcomes for children in the child welfare system, Barth et al. (2020; 2022) suggest that outcomes for Black children are similar to those of children of other racial/ethnic groups, though they acknowledge that few studies disaggregate analysis of outcomes by singular minoritized groups. These authors argue that once socioeconomic status and related risk factors are controlled, Black children's trajectories through the child welfare system are similar to those of other racial/ethnic groups. One exception to this trend relates to Black's children duration in foster care, which has been found to be about 25% longer than that of children from other minoritized groups, potentially attributable to their reduced likelihood of experiencing reunification and adoption as permanency outcomes (Wulczyn, 2020). These scholars further suggest that the pre-placement experiences of youth in the child welfare system may be more predictive of their outcomes, specifically that youth who enter care from homes with elevated risks, such as poverty, are more likely to display adverse sequelae post-foster care, regardless of their racial/ethnic background.

Summary

To summarize, the evidence is not conclusive as to how much maltreatment and child welfare involvement, including out-of-home placement, drive poverty in adulthood as distinct from being markers for children at risk of poverty in adulthood. Nevertheless, it is clear that children who have been maltreated and involved with child welfare are at elevated risk of intergenerational

poverty. It is also clear that poverty, child welfare involvement, and race/ethnicity intersect in consequential ways.

We turn next to a brief discussion of factors that lead to maltreatment and child welfare involvement for children, overall and by race/ethnicity, before turning to the question of what we know about policies and programs that might mitigate the risk of intergenerational poverty for these vulnerable youth, and for Black and Hispanic youth in particular.

II. Factors that lead to maltreatment and child welfare system involvement

Causal evidence on factors which lead to maltreatment and child welfare involvement is limited but strongest in describing the effects of household economic hardship on increased risk of child welfare involvement and, relatedly, the effects of income support and other public assistance policies on reducing risk for child welfare involvement. Given the high correlation between income poverty and child welfare involvement, evidence on the causal role of poverty in shaping such involvement highlights a potentially critical mechanism through which child welfare involvement may contribute to intergenerational poverty.

Parental income and employment

Theory suggests that parental income may impact maltreatment and child welfare involvement through two primary mechanisms. The resource and investment model, which is rooted in economic theory (Becker, 1991), emphasizes the detrimental consequences of material resource deprivation. Such limited resources may directly constitute child neglect or may produce circumstances that prompt child welfare involvement, such as insufficient resources to provide safe childcare. The family stress model offers psychological and sociological perspectives (Elder, 1974; Masarick & Conger, 2017), highlighting the effects of stress produced by economic deprivation on parental and child behavior and mental health. Family stress may lead to parental maltreatment behaviors or produce mental health challenges that pose maltreatment risks or prompt child welfare involvement.

The best evidence on the effects of income on maltreatment and child welfare involvement comes from research examining exogenous differences in income most commonly produced by differential access to social policy benefits. For instance, Cancian and colleagues (2013) capitalized on a policy experiment in Wisconsin in 1997-1998, which randomized families receiving Temporary Assistance for Needy Families (TANF) into two groups, one of which received greater child support benefits and one of which received less. Differences in child support received between the two groups were modest, ranging between \$101 and \$180 per year. Despite this modest difference in income, the study found that families with more child support income were about 10%, or 2 percentage points (PP), less likely to have a report of child maltreatment screened in over the course of two years.

While the Cancian and colleagues (2013) study benefited from the experimental randomization of families to two different income treatments, other research has capitalized on natural experiments in which policy benefits differ over time and place, providing exogenous sources of variation in families' income. In one such study, Berger and colleagues (2017) drew on state-

level differences in the generosity of Earned Income Tax Credit (EITC) benefits which produce exogenous differences in families' incomes. They employed an instrumental variables approach to examine the effects of this income variation on both child welfare system contact and parental behaviors serving as proxies for child neglect. The study found that \$1,000 in additional income produced an approximately 8% to 10% (0.58 to 0.70 PP) lower rate of child welfare contact and a 3% to 4% (1.0 to 1.2 PP) lower rate of parental behaviors proxying child neglect.

Both the Cancian et al. (2013) and Berger et al. (2017) studies employed rigorous methods and produced plausibly causal results. While the difference in effect sizes may suggest some imprecision in the estimates, there are additionally important differences in the sample populations. The Cancian et al. (2013) study examined TANF recipients, who represent an extremely low-income and highly selected population, while the Berger et al. (2017) study considered households plausibly eligible for EITC benefits, a population which includes moderate income families. Moreover, the Cancian et al. estimate is specific to the provision of child support income, which may be accompanied by decreased custodial parent gatekeeping and increased noncustodial parent involvement in children's lives, which may potentially result in better family functioning and decreased potential for maltreatment independent of the income transfer, itself.

Other studies that support the causal effects of income on child maltreatment and child welfare involvement primarily focus on state-level child welfare involvement patterns, reflecting the paucity of individual-level data sources which capture both income and child welfare involvement. These studies reinforce the plausibly causal relationships between income poverty and maltreatment and child welfare involvement, drawing on exogenous variation in income due to a range of policy differences, including EITC generosity and availability, Child Tax Credit (CTC) generosity, minimum wage level, and TANF restrictions. We offer an in-depth treatment of the policy implications of these studies in section III; here, we briefly summarize key findings which highlight the important role of income poverty in causing child welfare involvement. Briefly, Kovski and colleagues (2022b) found that \$1,000 in additional income available to families via EITC and CTC benefits led to a 5% lower state-level rate of child maltreatment investigations in the short term. Raissian and Bullingher (2017) found that an increase in minimum wage of \$1 per hour led to a 10% lower state-level rate of child neglect investigations. Ginther and Johnson-Motoyama (2017) found that the loss of TANF benefits led to increased rates of substantiated child maltreatment and increased foster care placement.

Beyond income itself, some causal evidence exists pointing to the importance of contextual economic factors in driving maltreatment and child welfare involvement. For instance, Raissian (2015) used plausibly exogenous shocks to unemployment rates caused by the economic recessions and recoveries in the US in the 2000-2010 timeframe to examine the effects of county-level unemployment on county-level maltreatment and child welfare involvement rates. She found that a 1 percentage point higher unemployment rate led to a reduction in child maltreatment reports of just over 4%. She argues that these results may reflect unemployed parents' increased ability to invest time in caring for children and to the context and stress of low wage work. Additionally, Lindo and colleagues (2018) found differences in the relationships between county-level employment factors, including employment rates and mass layoff rates, and child maltreatment rates, suggesting that increased unemployment among men predicts

greater child maltreatment while increased unemployment among women predicts lower rates of child maltreatment. Some data limitations, particularly around the sex of child maltreatment perpetrators, which is frequently missing in available data, complicate interpretation of such findings. Moreover, economic factors, such as the gender wage gap, could also help explain differential consequences of lost maternal versus paternal employment and risk of child maltreatment.

Correlational evidence on other family factors

In addition to this causal evidence, a much more substantial body of research illustrates factors that are strongly and consistently associated with maltreatment and child welfare involvement, but which are typically only measured in observational data, posing challenges to causal estimation. Several meta-analyses capture the consistent correlations of individual and family-level characteristics and experiences with risk for maltreatment and child welfare involvement. Van Ijzendoorn and colleagues (2020) conducted an umbrella synthesis of recent (2014-2018) meta-analyses, synthesizing many of these results. They report effect sizes in *Cohen's d*, transforming effect sizes across meta-analyses. The study identified five factors consistently predictive of increased risk of maltreatment or child welfare involvement. These included parental experiences of maltreatment when they were children, which was the factor most strongly correlated with maltreatment of their own children (d=0.47). This factor is particularly robustly investigated in a meta-analysis by Assink and colleagues (2018) which focused specifically on intergenerational transmission of child maltreatment and estimated a 3-fold increased risk of maltreatment among families in which a parent had, themselves, experienced child maltreatment compared to those in which a parent had not.

The van Ijzendoorn and colleagues (2020) umbrella synthesis also identified parental experiences of intimate partner violence (IPV), particularly of physical and emotional abuse, as an important correlate of maltreatment. While the overall effect size of this factor was d=0.41, these results were based on a smaller set of primary empirical studies which varied substantially in effect size. Nonetheless, IPV is certainly a well-established predictor of child maltreatment (Assink et al., 2019; Mulder, 2018).

Other parental characteristics also emerged from this and other meta-analyses as predictors of maltreatment and child welfare involvement, including parental insecure attachment and dependent personality characteristics (van Ijzendoorn et al., 2020); parental history of mental health conditions and current mental health characteristics, including depression, anxiety, and anger (Assink et al., 2019; Mulder et al., 2018; Stith et al., 2009); parental criminal legal system involvement (Mulder et al., 2018; Stith et al., 2009); and parental substance abuse (Assink et al., 2019; Stith et al., 2009). Finally, two other family characteristics appeared as factors consistently associated with higher risks for maltreatment and child welfare involvement, namely single-parent family structure (Mulder et al., 2018; Stith et al., 2009; van Ijzendoorn et al., 2020) and low family socioeconomic status (Assink et al., 2019; Mulder et al., 2018; Stith et al., 2009; van Ijzendoorn et al., 2020).

Race and ethnicity

The strong relation between family poverty and race/ethnicity in the United States, especially among the child population (Duncan & LeMenestrel, 2019; Thiede et al., 2021), has implications for maltreatment and child welfare involvement. A strong evidentiary base exists for the overrepresentation of Black and Latinx children in the child welfare system. Specifically, Black children are more likely than their white counterparts to be referred to the child welfare system regarding suspected maltreatment (Administration for Children and Families, 2022a; Drake et al., 2011; Putnam-Hornstein et al., 2013) and to be substantiated for maltreatment (Administration for Children and Families, 2022a; Drake et al., 2011; Putnam-Hornstein et al., 2013). According to the most recent federal data, Black children have the second highest maltreatment victimization rate (following American Indian children), at 13.2 per 1,000 children of the same race or ethnicity (Administration for Children and Families, 2022a). They are also more likely than white children to be placed in foster care (Administration for Children and Families, 2022b; Wulczyn, 2020), and to remain in foster care for longer durations (Administration for Children and Families, 2022b; Wulczyn, 2020).

Similarly, Latinx children have higher rates of referrals, substantiations, and placement, although this does vary by sub-group (e.g., US-born children have higher rates of child welfare system involvement than immigrant children) (Administration for Children and Families, 2022a; Drake et al., 2011; Putnam-Hornstein et al., 2013). The limited rigorous data on children from Native populations (American Indian/Alaska Native) suggest that they have the highest rate of maltreatment at 15.5 per 1,000 children of the same race or ethnicity (Administration of Children and Families, 2022a). However, it is not clear whether their trajectories in the child welfare system are similar to other minoritized groups.

These disparities have been attributed to elevated risks among families from minoritized groups (Barth et al., 2022; Barth et al., 2020; Drake et al., 2011) as well as structural racism internal and external to the child welfare system (e.g., increased community surveillance, biased decision-making) (Boyd, 2014; Dettlaff & Boyd, 2022). Both explanations can be considered in the context of poverty. Specifically, families from minoritized communities are more likely to experience poverty-related risks, such as mental health challenges, substance use, and criminal justice system involvement (Birckhead, 2012; Jones Harden & Slopen, 2022; Wadsworth et al., 2016). Moreover, minoritized families are more likely to reside in neighborhoods with higher concentrations of poverty and to experience the adverse neighborhood conditions that characterize these communities (Jones Harden & Slopen, 2022; Molina et al., 2012; Quillen, 2012), including child maltreatment (Coulton et al., 2007; Maguire-Jack et al., 2022).

Scholars have also attempted to disentangle the influences of race and poverty on child welfare system involvement. For example, in a population-based study, Putnam-Hornstein et al. (2013) documented that Black children were over two times as likely as white children to experience child maltreatment referral and substantiation, as well as foster care placement, prior to five years of age. However, when the authors adjusted for the contribution of socioeconomic factors, they found that low-SES Black children, as well as low-SES Latinx children, were less likely to be referred, substantiated, and enter foster care than White children from similar SES backgrounds. As the authors state, these findings do not dismiss the significance of racial disparities in child welfare involvement but underscore the importance of addressing the

confluence of family, community, and structural risks that accompany child poverty status (Jones Harden & Slopen, 2022).

The correlational nature of many of these findings represents an empirical limitation. Particularly, in considering the relationships among maltreatment and child welfare involvement and intergenerational poverty, we recognize that many of the factors that predict child welfare involvement are also correlated with income poverty, complicating the question of whether mitigating such factors is likely to have an independent effect on child maltreatment or child welfare involvement rather than shaping children's future experiences of poverty through another mechanism. However, in so far as income poverty may be driving both child welfare involvement itself and associated risks, such as parental substance use or single-parent family structure, interventions to reduce childhood exposure to income poverty are promising levers to reduce the deleterious long-term effects of child maltreatment, through direct or indirect mechanisms, and thereby to disrupting intergenerational poverty. Thus, in the following section, we review evidence about those policies and programs which reduce child maltreatment and may serve to reduce intergenerational poverty.

III. Policies and programs to reduce the risk of child maltreatment with implications for reductions in intergenerational poverty

In this section, we review policies and programs that research suggests may reduce child maltreatment and child welfare system involvement. Specifically, we review the evidence on economic support policies, early childhood education and care programs, Medicaid, and family-and community-focused interventions. Throughout, we distinguish between those policies and programs for which the evidence is purely correlational and those for which the evidence is plausibly causal and, when possible, focus on the latter. Notably, many of these policies and programs have been demonstrated to reduce both child maltreatment and poverty and, in some cases, intergenerational transmission of poverty. However, there is little (particularly causal) direct evidence of the degree to which reductions in child maltreatment may act as a core mechanism linking these policies and programs to reductions in intergenerational transmission of poverty.

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⁶ Note that, with the exception of our review on the effects of out-of-home placement on subsequent (young adult) outcomes, we are aware of no rigorous evidence on the impact of child welfare system involvement (and resulting interventions) on subsequent outcomes that may have implications for intergenerational transmission of poverty. Indeed, research has not determined whether CPS involvement that does not lead to foster care placement has any (positive or negative) influence on subsequent life trajectories net of (potential) maltreatment experiences. However, because predictive analytic risk assessment models have both gained traction in CPS decision making and remain highly controversial, these techniques merit brief mention. In essence, predictive risk modeling in child welfare is a data driven technique that harnesses a range of administrative data to predict a child's or family's risk for abuse or neglect. The resulting 'risk score' is used to inform, but not dictate, CPS decisions with respect to investigating, substantiating, removing, or reunifying a child. Research to date indicates that, relative to caseworker decisions in the absence of such information, decisions made in the context of predictive risk assessment perform better, on average, with respect to subsequent maltreatment-related outcomes (Cheng et al., 2022; Cuccaro-Alamin et al., 2017). In addition, some evidence suggests that the use of predictive risk modeling in CPS decision making has the potential to substantially reduce racial disparities in case outcomes (Cheng et al., 2022). To the best of our knowledge, however, whether decisions made with or without the aid of predictive risk assessment influence other life outcomes has not been examined.

Economic support policies

An extensive and decades-long literature has documented that income and poverty are highly correlated with child maltreatment and child welfare system involvement. Indeed, across the wealthy countries, low-income and poverty are the strongest and most consistent risk factors for child maltreatment and child welfare system involvement, and these relations are particularly large with respect to child neglect (Berger and Waldfogel, 2011). Moreover, a growing body of research, predominantly from the United States, suggest that the association between income and child maltreatment is likely causal and that relatively modest increases in income, particularly among lower-income families, lead to substantial reductions in child welfare system involvement (Font and Maguire-Jack, 2020b). Studies in this area predominantly leverage exogenous changes in economic support policies across states and over time to examine the effects of associated changes in income on child maltreatment and/or child welfare system involvement. They span tax policy, cash welfare programs, food and nutrition assistance programs, child support enforcement, minimum wage policies, and unconditional cash transfers. Our review focuses specifically on those studies that have produced plausibly causal estimates.

Tax policies. Tax policies, particularly the Earned Income Tax Credit (EITC), have been the subject of the most extensive and most rigorous research regarding the effects of economic support policies on child maltreatment. Several state-level analyses demonstrate that the EITC is associated with reduced child maltreatment. Klevens and colleagues (2017), for example, use state-level data from 1995-2013 and difference-in-difference (DD) analyses to examine rates of pediatric abusive head trauma hospital admissions over time as a function of whether a statelevel EITC is in place and, among states with an EITC, whether the credit is refundable. They find states with a refundable EITC to have 3.1 fewer pediatric abusive head trauma hospital admissions per 100,000 children than states without a refundable EITC but find no difference in such hospital admissions between states with only a nonrefundable EITC and states without an EITC. Considering links between state EITC policies and child welfare caseloads, Kovski et al.'s (2022a) two-way fixed effects (DD) analyses of state-level data spanning 2004-17 examine both whether a state had a refundable EITC in a given year and the generosity of the credit (percent of the federal EITC supplemented by the state). They find the presence of a refundable state EITC to be associated with 407 fewer child maltreatment investigations for child neglect per 100,000 children, with a larger effect for children 0-5 than 6-17 (544 vs. 347 fewer neglect investigations per 100,000 children). Furthermore, their analyses indicate that a 10-percentage point increase in the generosity of the credit is associated with 220 fewer overall investigations, 241 fewer neglect investigations, and 55 fewer substantiations per 100,000 children. Rostad et al.'s (2020) statelevel regression analyses of associations of the presence of refundable and non-refundable state EITCs with the number of children entering foster care in a state and year, adjusting for state

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⁷ In addition, evidence from Denmark leveraging an exogenous decrease in cash welfare benefit generosity to low-income families documents a large increase in the likelihood of a child being placed in foster care, finding that a 30% decrease in monthly disposable income, as a result of the benefit reduction, resulted in a 25% increase in the annual risk of out-of-home placement for children in families receiving the benefit (Wildeman and Fallesen, 2017). ⁸ Several studies have also examined the relation between state or local unemployment rates and child maltreatment (see, e.g., Brown and De Cao, 2020; Raissian, 2015). However, because these studies do not consider the impact of unemployment insurance (or other safety net policies) on child maltreatment, we exclude them from our review.

socioeconomic characteristics and state and year fixed effects, suggest that the presence of a refundable state EITC is associated with 11% fewer foster care entries.

Two additional studies leverage specific natural experiments to examine the effect of tax policy generosity on state-level child welfare caseloads. Given that most state EITCs are linked to the size of the federal benefit, Biehl and Hill (2018) leverage the federal expansion of the EITC under the American Recovery and Reinvestment Act of 2009 and employ a DD strategy to investigate the impact of the expansion in states with an EITC policy (versus those without) on foster care caseloads, finding the expansion to be associated with a 7% decrease in foster care entry rates for states with a state-level EITC relative to states without an EITC. Similarly, Kovski and colleagues (2022b) leverage a natural experiment created by an increase in the EITC and Child Tax Credit (CTC) under the Protecting Americans Against Tax Hikes (PATH) Act of 2015 and, using fixed-effects and DD methods, find a \$1,000 per-child increase in resulting tax refunds to be associated with a 5% reduction in state child maltreatment investigations in the week of and 4 weeks following refund payments.

Finally, two individual-level studies provide rigorous evidence that increased income resulting from increased tax credit generosity is likely to reduce child maltreatment. Berger and colleagues (2017) use an instrumental variables strategy that leverages exogenous variation in family income due to differences in state and federal EITC benefit generosity across states and over time and find that a \$1,000 increase in income leads to a 3-4% reduction in parental child neglect-related behaviors and an 8-10% reduction in child maltreatment investigations among low-income single-mother families. Most recently, Rittenhouse (2022) employs a regression discontinuity approach taking advantage of the January 1st birthdate cutoff for qualification for annual child-related tax benefits to examine the effect of exogenous variation in tax benefit generosity to low-income families on child maltreatment over a 20-year period in California, finding that a \$1,000 increase in income reduces child maltreatment investigations by 3% and days spent in foster care by 8%.

Food and nutrition programs. We identified three rigorous studies examining the impact of food and nutrition programs on child maltreatment. Two focus specifically on the Supplemental Nutrition Assistance Program (SNAP) program; the third considers both SNAP and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Johnson-Motoyama and colleagues (2022) use two-way fixed effects regressions and instrumental variables models in which the number of state SNAP income generosity policies in effect (broad based community eligibility, excluding child support received from income calculation, providing transitional SNAP benefit for families leaving cash welfare, simplified reporting of changes in household circumstances) are used to instrument state SNAP caseload size and examine the effects of SNAP policy generosity and caseload size (participation) on child maltreatment rates across states and over time from 2004-16. Results indicate that the effect of each additional income generosity policy and that of a 5% increase in SNAP caseload size are similar in magnitude with respect to child maltreatment, with each resulting in an 8-9% reduction in child maltreatment investigations, 9-10% reduction in substantiations, and 9-15% reduction in foster care placements. Bullinger et al. (2021) leverage within-monthly Census block group variation in proximity to a SNAP-authorized retailer to estimate monthly within-Census block group changes in child maltreatment rates in Connecticut between 2011-15. They find that, in large rural

locales, each additional SNAP-authorized retailer in a Census block group is associated with a 4% decrease in maltreatment reports and an 11% decrease in maltreatment substantiations. Considering the effect of both SNAP and WIC participation on child maltreatment, Lee and Mackey-Bilaver (2007) use individual-level administrative data on Medicaid-enrolled children in Illinois and sibling fixed-effects models and find that participation in SNAP only, WIC only, and both programs is associated with reductions in substantiated child maltreatment of 7%, 11%, and 9%, respectively.

Cash welfare. A handful of rigorous studies (and many correlational studies, which we do not review) have assessed the effects of the Aid to Families with Dependent Children (AFDC) and Temporary Assistance to Needy Families (TANF) programs on child maltreatment. For example, Paxson and Waldfogel (2002) leverage state-level variation in combined AFDC/TANF and food stamps benefit generosity from 1990-96, as well as a host of other state-level factors, to examine the association of benefit generosity with child maltreatment, finding a 10% increase in a state's maximum combined benefit to be associated with a 24% reduction in its foster care caseload. However, they find nonsignificant associations of benefit generosity with both child maltreatment reports and substantiations. In addition, they find welfare-related work requirements to be associated with fewer physical abuse investigations and foster care entries, work incentives to be associated with reductions in overall and neglect substantiations, and time limits to be associated with increased overall and neglect substantiations. In an extension of this work (Paxson and Waldfogel, 2003), they examine the impacts of the 1996 welfare reform on child maltreatment caseloads using data from 1990-98, finding consistent evidence that more generous benefits are associated with large reductions in the foster care caseload and some evidence that strict time limits and sanction policies are associated with greater rates of maltreatment substantiation. More recently, Ginther and Johnson-Motoyama (2017) use DD methods and state-level data from 2004-15 to examine the effects of TANF behavioral requirements (but not benefit levels) on child welfare caseloads. They find that severe sanctions (loss of benefits) are associated with greater maltreatment substantiations⁹ and foster care caseloads, and that time limits of less than five years are associated with greater substantiations.

Finally, in an individual-level analysis of Delaware's randomized welfare reform experiment in which families were assigned to either the AFDC program (unconditional cash benefit for families with children) or TANF-like welfare program that included work requirements, a family cap, and a 24-month time limit on cash benefits, Fein and Lee (2003) find that participants assigned to the TANF-like program were more likely to experience sanctions, have their case closed due to sanctions, and reach the 24-month time limit. This group also experienced a large increase (on the order of 50%) in substantiated child neglect reports. Notably, however, this study does not directly examine the effect of income or benefit level on child maltreatment.

Minimum wage policy. We identified two studies that examined the link between minimum wage policy and child maltreatment. Raissian and Bullinger's (2017) state-level regression analyses of change over time in the state minimum wage and change over time in child maltreatment rates, with extensive state sociodemographic controls, state-specific time trends, and state and time

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⁹ Consistent with this finding, Slack et al. (2007), using individual-level data from Illinois and fixed-effects models, find welfare sanctions without income supplementation from other sources to be associated with increased risk for a child neglect investigation.

fixed effects, finds that a \$1 per hour increase in the state minimum wage (an increase of 16% on average) is associated with a 9% decrease in child maltreatment investigation rates (marginally significant at p<.10) and a significant decrease in neglect investigations of 10%. However, Schneider et al. (2022), using survey data from the Fragile Families and Child Wellbeing Study and behaviorally-approximated measures of child maltreatment (parental physical aggression, psychological aggression, physical neglect, supervisory neglect) to examine the effect of a \$1 per hour increase in the local (city) minimum wage, find inconsistent results in terms of magnitude, direction, and significance of the estimates depending on model specification (lagged dependent variable, city fixed effects, individual fixed effects). While the two studies provide inconsistent evidence regarding the relation between the minimum wage and child maltreatment, Raissian and Bullinger's findings are particularly encouraging in that the study arguably leverages a more rigorous and representative approach, thereby presenting more generalizable findings than those of Schneider and colleagues. Also, Raissian and Bullinger analyze the impact of the minimum wage on child maltreatment rates rather than solely self-reported parental behaviors.

Child support enforcement. In the only study of the relation between child support enforcement and child maltreatment of which we are aware, Cancian and colleagues (2013) leverage a large, randomized experiment in Wisconsin in which TANF recipients received either the full amount of child support paid on their behalf or the greater of \$50 or 41% of the child support paid on their behalf (with the remainder being retained by the state as cost reimbursement for cash welfare expenditures). Using linked administrative data, they find receipt of the full child support passthrough (approximately \$101 greater child support receipt per year) to result in a 10% lower likelihood of a child maltreatment investigation. Notably, this effect size is exceptionally (and perhaps implausibly) large; nonetheless, the rigor of the study suggests that increased child support receipt may have a causal effect on reduced child maltreatment.

Unconditional cash transfers. One recent study considers the effect of an unconditional cash transfer on child welfare system involvement. Bullinger et al. (2022) leverage exogenous variation in the amount of the transfer received from the Alaska Permanent Fund Dividend as a function of both birthdate cutoffs and annual payment sizes, finding that an additional \$1,000 in benefit receipt reduces the probability that a child is reported to child welfare services by 26%.

Early childhood education and care programs

A relatively small literature has rigorously examined whether early childhood education and care program participation—including childcare subsidies, prekindergarten programs, Early Head Start, and Head Start—may serve to reduce child maltreatment. ¹⁰ Such programs have the potential to reduce maltreatment by providing access to consistent childcare when parents may

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¹⁰ There are also a handful of descriptive studies in this area. For example, Maguire-Jack et al. (2017) find an association of childcare subsidy receipt with decreased supervisory (but not other forms of) neglect. Klein et al., (2017) using a sample of child welfare-involved children find that, whereas participation in an early childhood education and care program, in general, was not associated with the probability of a subsequent foster care placement, Head Start participating children were 93% less likely to be placed in foster care, and children experiencing multiple types of childcare were 7 times more likely to be placed in foster care, than children who were not participating in an early childhood education and care program. Ha et al. (2015) find associations of unstable childcare arrangements with self-reported measures of maltreatment.

be working, reducing the time children spend with (potentially maltreating) parents (both of which may reduce parental stress) and, in some cases, intervening directly with parents around developmentally appropriate expectations and parenting strategies. At the same time, however, teachers and childcare providers are mandatory child maltreatment reporters such that exposure thereto has the potential to increase reporting.

On the whole, findings from studies examining the impact of such programs on child maltreatment have been somewhat inconsistent. Pac (2021), for example, in a state-level study using event history and difference-in-difference-in-differences methods leveraging exogenous variation across states and over time in access to early childhood education and care programs (childcare subsidies, Head Start, Early Head Start, state prekindergarten programs) on child welfare investigations, finds little evidence of effects of these programs on investigations overall or for abuse or neglect. Yet, studies of several specific programs have yielded promising results. Zhai and colleagues (2013), for instance, use data from the Fragile Families and Child Wellbeing Study and propensity score matching to compare child maltreatment outcomes for children participating in Head Start with those of otherwise similar children. They find that Head Start-participating children were 45% less likely than those in parental care to be investigated for child maltreatment by age 5 but that the likelihood of investigation did not differ between children enrolled in Head Start and those enrolled in other (nonparental) forms of care.

The most rigorous evidence to date comes from evaluations of Early Head Start and the Chicago Parent-Child Centers programs. Green and colleagues (2014) linked child-level data on a subsample of children participating in the randomized Early Head Start Evaluation (those in 7 of 17 sites) to state child welfare administrative data. Initial analyses found that, between ages 5 and 9, Early Head Start participants were approximately 36% less likely than control group members to have been involved with the child welfare system and had 38% fewer total child welfare system encounters. These differences were largely driven by reductions in physical and sexual abuse investigations, whereas neglect investigations were more likely among the treatment than control group. In addition, effects were uneven across sites, perhaps reflecting differences in program structure or geographic factors. Moreover, follow-up analyses at age 15 found no treatment-control group differences in child welfare investigations, substantiations, or foster care placements, perhaps reflecting fade-out of the initial effects. Conversely, the randomized evaluation of the Chicago Parent-Child Centers program (Reynolds and Robertson, 2003) demonstrated long-term reductions in child welfare involvement: between birth and age 17, participants were about 50% less likely to experience a child maltreatment investigation or substantiation than control group members, with similar effects for abuse and neglect. 11 Notably, many of these evaluations were implemented with samples that were largely from minoritized groups (e.g., 2/3 of the EHS sample was Black and Latinx; the CPCC sample was 93% Black).

Medicaid

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¹¹ In addition, Sandner and Thomsen (2020), leveraging exogenous variation in childcare access across counties and over time as the result of a federal reform mandating early childhood education and care participation in Germany find a 1.8% decrease in child maltreatment investigations per one percentage point increase in childcare availability (supply).

Whether expanded access to healthcare via public programs for low-income families is likely to increase, decrease, or have no effect on child maltreatment and/or child welfare system involvement is theoretically ambiguous. Because healthcare providers are mandated reporters, greater interaction therewith may result in increased reports to CPS. At the same time, greater access to healthcare for children and (potentially) parents may result in decreased child maltreatment and/or CPS involvement for several reasons. First, such access may reduce parental stress about their own or their children's healthcare needs and the cost thereof, including by reducing out-of-pocked medical expenditures and medical debt. Second, to the extent that parents access treatment for their own health and mental health needs, they may be better equipped to provide safe and consistent care for children. Third, to the extent that children's health and mental health needs are treated (early), they may be easier to parent and thereby be less likely to experience maltreatment. Fourth, healthcare providers may serve as a referral source to other programs spanning parenting behaviors, child development, and food and nutrition, that may help reduce a family's likelihood of maltreatment or child welfare system contact. As such, access to low-cost or free healthcare may help families meet their children's health and mental health and, potentially, developmental and material needs, which may result better care for children and a decreased probability of being reported for child abuse or neglect.

Three recent studies leverage natural experiments and DD frameworks to examine the impact of Medicaid expansions under the Affordable Care Act on child maltreatment rates. In a county-level analysis of California, Pac (2019) considers access to Medicaid from 2010-13 as a function of exogenous variation in whether a county-level expansion of the state program has taken place, finding expanded access to Medicaid to be associated with an 11% reduction in physical abuse investigations but no differences in overall investigations or investigations for other types of maltreatment. Turning to state-level analyses, Brown et al. (2019), using data from 2010-2016, find an 11% decrease in neglect investigations for expansion states relative to non-expansion states in the post-expansion period, but no effect on abuse investigations. Finally, McGinty and colleagues (2022), using a staggered DD approach and 2008-18 data, find state Medicaid expansions to be associated with reductions in neglect investigations of 13% for 0-5-year-olds, 15% for 6-12-year-olds, and 16% for 13-17-year-olds, but find no effects for physical abuse. Together, these studies suggest a potential causal relation of Medicaid access with reductions in child welfare investigations, though the evidence is less certain with respect to whether such reductions may predominantly reflect reductions in neglect or abuse.

Family- and community-focused interventions.

A wide and heterogenous range of family- and community-focused interventions aim to prevent child maltreatment by improving parenting and family functioning. On the whole, evidence on the efficacy of these programs is relatively limited; many have not been rigorously evaluated and, for those that have, results have often been mixed. However, our review of the literature suggests that there are multiple early home visiting models and at least one community-focused intervention (the Triple P – Positive Parenting Program; hereafter, Triple P) that have been rigorously evaluated and have shown promise for reducing child maltreatment. It is also noteworthy that many programs identified as effective in reducing child maltreatment have been based on evaluation samples in which a majority of participants were children and families of color (California Evidence-Based Clearinghouse, 2022). Finally, it is important to recognize that

the direct evidence on whether these programs improve family economic circumstances and, in particular, whether they lead to reductions in the intergenerational transmission of poverty and socioeconomic status is both limited and inconsistent; despite these caveats, they have shown promise with respect to outcomes that are correlated with such.

Early home visiting programs. Early home visiting programs have gained increasing traction as an effective means of family intervention. It is important to recognize, however, that individual programs differ substantially in terms of target population, program quality and intensity, staff qualifications, and curriculum. As such, home visiting should be viewed as a 'catch-all' category of intervention and it is not possible to determine whether 'home visiting,' in general, serves to reduce child maltreatment. Rather the focus must be on the effects of specific programs. Nonetheless, there are several common elements of most home visiting programs. First, they tend to primarily target socially and economically disadvantaged families that are at risk for poor parenting and child developmental outcomes (although some locales have implemented universal models). Indeed, the most recent demographic data on families participating in the national home visiting program document that 24% of participants are Black and 30% are Latinx (National Home Visiting Resource Center, 2022). Second, home visiting programs are typically intended to begin in the prenatal period or shortly after birth and, third, most programs primarily focus on parental education, competency, and skill building, and providing access/referrals to other formal and informal community supports. Given the extensive number of existing home visiting program models and the enormous number of studies in this area, we focus our review on the conclusions from recent meta-analyses and review articles.

Two recent reviews (Duffee et al., 2017; Sama-Miller et al., 2019) and three recent metaanalyses (Casillas et al., 2016; Gubbels et al., 2021; van der Put, 2017) yield several general conclusions. First, eight early home visiting programs have demonstrated meaningful reductions in child maltreatment via rigorous randomized evaluation in at least one sample. These include: Child First, Early Head Start Home Visiting, Early Start (New Zealand), Health Access Nurturing Development Services (HANDS), Healthy Families America, Nurse-Family Partnership, Parents as Teachers, and SafeCare Augmented. Second, average effect sizes are relatively modest. The mean effect sizes estimated in recent meta-analyses are: .14 (Gubbels et al., 2021; program range: .01-.68), .21 (van der Put, 2017; program range: .07-.34), and .22 (Castillas et al., 2016; no program range provided). Third, effects tend to be larger for programs that serve a larger proportion of non-white families (Gubbels et al., 2021). Fourth, replication is relatively uncommon: many programs have demonstrated positive effects in some sites or samples that have not been replicated in other sites or samples (Sama-Miller et al., 2019). Note, also, that in addition to the programs included in these reviews, a recent randomized evaluation of the Family Connects universal (community-wide) nurse home visiting program for newborns in Durham County, North Carolina, using a sample of approximately 5,000 families randomized at birth to program eligibility or a status quo control group, found that treatment group children had 39% fewer child welfare investigations than control group children (Goodman et al., 2021).¹²

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¹² Note that these findings are not necessarily consistent with those from the U.S. Department of Health and Human Services Home Visiting Evidence of Effectiveness review of the effects of early home visiting models, which focused on a stricter definition of child maltreatment that was limited to substantiated maltreatment reports, custody loss, and out-of-home placement; health care encounters due to child maltreatment; and indicators of child maltreatment on the Conflict Tactics Scale-Parent Child measure. Of particular note, child maltreatment

Community-focused prevention programs (Triple P). Several large-scale community-focused interventions aimed at improving parenting and family functioning and reducing child maltreatment have been launched in recent decades. Such programs typically include universal (community-level) and targeted components, such that particularly at-risk families have opportunities to engage in more intensive services than their less at-risk counterparts. That is, they tend to offer a continuum of interventions intended to address the needs of particular subgroups of families via direct service provision and/or by assisting families to access existing programs and services (Berger and Font, 2015). Such programs are difficult to rigorously evaluate and the evidence on their efficacy is the quite limited. Moreover, they tend to be difficult to implement and sustain, as well as relatively expensive. ¹³ A notable exception, however, is Triple P, which has been implemented in a growing number of communities and has been subject to the most rigorous evaluation of such programs to date. Prinz et al. (2009), in a random assignment evaluation of Triple P in 18 counties that were randomly assigned to Triple P implementation or services as usual, found that, 2 years after implementation, Triple P counties experienced substantial reductions in substantiated child maltreatment, out-of-home placements, and hospital and ER admissions for child maltreatment-related reasons, with effect sizes of 1.09, 1.22, and 1.14, respectively, relative to control counties. In a more recent quasi-experimental study, Schilling et al. (2020) use DD methods to compare county-level child welfare and hospital discharge data for 34 counties that implemented Triple P and 66 that did not in North Carolina from 2008-15. Results indicate that implementation was associated with a 4% reduction in county-level child welfare investigations and a 7% decrease in foster care placements. The study found no effects on hospital admissions for child maltreatment-related reasons

IV. Conclusion

Child welfare involvement occurs most commonly among low-income families and racially minoritized families and in correlation with a host of other experiences and characteristics which pose risks for intergenerational poverty. While there is not definitive causal evidence on the effects of child welfare involvement on eventual adult poverty, extant research makes it clear that children who have been maltreated and involved with child welfare are at elevated risk of intergenerational poverty. Causal evidence is also limited in terms of those factors which predict child maltreatment and child welfare system involvement, but the most robust evidence indicates that family economic hardship increases risk while increased family income reduces risk of child maltreatment and child welfare involvement. Thus, while more exhaustive evidence is warranted to differentiate the independent effects of child welfare involvement on intergenerational poverty from the role of child welfare involvement as an indicator for a range of risks children may face for intergenerational poverty, the body of existing research is quite clear that children who experience maltreatment or involvement with the child welfare system face elevated risks for

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investigations were excluded as a potential outcome. In contrast to results from the published reviews and metaanalyses cited above, the HomeVEE review indicates that child maltreatment was not measured in evaluations of Child First and Family Connects, and that no effect on child maltreatment was found for Early Head Start Home Visiting and Parents as Teachers. See:

https://homvee.acf.hhs.gov/outcomes/reductions%20in%20child%20maltreatment/In%20Brief.

¹³ For example, the Durham Family Initiative, which began as a large-scale community-level effort that included a range of universal and targeted components was ultimately scaled down and became the Durham Connects (Family Connects) home visiting program.

intergenerational poverty. Thus, those policies and programs that best reduce risk of child maltreatment offer promising avenues for reducing intergenerational poverty.

Of the policies and programs reviewed above, we find the strongest and most consistent evidence of plausibly causal effects on reduced child maltreatment for direct income transfers to low-income families (with the best evidence from tax transfer studies), a select number of high-quality home visiting programs, and Triple P. With respect to economic support policies, research using rigorous identification strategies in both state- and individual-level analyses consistently finds a substantial inverse relation between the generosity of tax credits for low-income families and child maltreatment, spanning behavioral measures, investigations, substantiations, and foster care placements, such that the increased income available to such families serves to reduce maltreatment. In addition, rigorous evidence from a randomized evaluation indicates that greater child support passthrough income leads to reduced child welfare investigations, and that from a rigorous quasi-experimental study indicates a large reduction in child welfare involvement resulting from an unconditional cash transfer. However, each of these policies has been examined in only one study to date.

The evidence for a causal role of other economic support policies is more mixed given both that there have been fewer rigorous (particularly individual-level) studies in other policy domains and that existing individual-level studies face considerable threats to causal identification. As such, existing research provides modest evidence that food and nutrition assistance, cash welfare benefit levels, less stringent behavioral requirements in cash welfare policies and, potentially, more generous minimum wage policies have the potential to contribute to reductions in child maltreatment.

Finally, it is important to note that, while research on the effects of economic support policies (and income) on child maltreatment has not explicitly examined heterogeneity by race and ethnicity, given that populations of color, and Black and American Indian populations in particular, are disproportionately likely both to be low-income/poor and child welfare system-involved, economic support policies have the potential to disproportionately benefit these groups and, thereby, to reduce racial and ethnic disparities in child maltreatment and child welfare system involvement. For example, in a recent simulation of the effects of reductions in child poverty that are likely to result from the implementation of anti-poverty policy packages recommended in a 2019 National Academy of Sciences, Engineering, and Medicine report (Duncan & LeMenestrel, 2019) on reductions in child maltreatment investigations, Pac and colleagues (in press), using the best available estimates of the causal effect of income on child maltreatment, estimate that reducing child poverty by 40-46% will result in 11-20% fewer child maltreatment investigations. Moreover, their estimates suggest 2-3 times larger effects among Black and Hispanic children than white children (American Indian children were not separately analyzed).

With respect to other policies and programs, our review suggests that a handful of early home visiting programs have demonstrated plausibly causal evidence of child maltreatment reduction at generally modest magnitudes in at least some rigorous studies and on at least some measures of maltreatment. Notably, however, replication of results in other samples/studies has been inconsistent. Existing evidence on the Triple P community-based initiative is also quite

promising, though effect size estimates have varied considerably. Additionally, evidence from aggregate-level quasi-experimental studies of Medicaid expansions under the ACA indicates that increased access to Medicaid has the potential to reduce child welfare system involvement by a substantial amount (~10-15%), though whether this is primarily due to reductions in abuse or neglect is unclear. Finally, the evidence on early childhood education and care programs is quite mixed with the most promising findings for Early Head Start and the Chicago Parent-Child Centers program. However, the Early Head Start effects appear to fade over time, and the Chicago program was a relatively small-scale, high-intensity intervention which was delivered in the mid-1980s.

Despite the effectiveness of specific policies and programs for reducing maltreatment and child welfare involvement, some scholars have pointed to service disparities according to race and ethnicity. For example, Rodenberg (2004) examined service disparities using national secondary case file data and descriptive and variance estimation statistics. She found that Black families received fewer housing, education, employment, and income services overall than white families, disparities that were even more pronounced when family need was considered. She argued that these service disparities were due to the higher levels of poverty of Black families. Further, Choi et al. (2021) documented that children of color were less likely than white children to receive services that were part of differential/alternative response programs, designed to prevent a formal child welfare response through the provision of services such as parenting, mental health, and substance abuse interventions.

It is also important to underscore the paucity of research on the effects of child welfare services on children, in particular regarding intergenerational poverty. Barth et al. (2020) provide a recent review of rigorous studies (i.e., studies using appropriate comparisons) which examined child outcomes following child welfare system involvement that is informative, to some extent, vis-à-vis potential intergenerational transmission of poverty. The authors reported mixed findings with regard to child safety and juvenile/criminal justice involvement, as well as health, educational, and behavioral outcomes. They conclude that there is limited support that child welfare system involvement per se produces poor outcomes for affected children. However, they also underscore that a major limitation to extant research is the lack of an explicit focus on which services children receive while they are involved in the child welfare system (e.g., preventive services, inhome vs. out-of-home placement, and other therapeutic and support services for children and their caregivers). Increased research in this domain has the potential to be informative about the impact of child welfare services on children's outcomes that relate to their vulnerability to intergenerational poverty.

In sum, although limited and often correlational, current research suggests that children who experience maltreatment and become engaged with the child welfare system are at elevated risk for intergenerational poverty. Extant evidence documents that maltreated children and children placed in out-of-home care are more likely to have poor educational and employment outcomes, as well as reduced income and wealth. Moreover, they have a higher likelihood of poverty-related risks in young adulthood, such as mental health difficulties and involvement in the juvenile/criminal justice system. Although such findings are not fully consistent across studies, some studies suggest that children from minoritized backgrounds may be more likely to experience adverse long-term SES outcomes, potentially due to factors beyond child

maltreatment and child welfare system involvement, specifically long-term family poverty. Future research should capitalize on causal methods to examine the linkage between child maltreatment and adult socioeconomic outcomes. Further, this research should consider the influence on adult SES outcomes of factors such as maltreatment and placement types, gender and developmental phase, child welfare trajectories (e.g., permanency outcomes, durations in care), and other poverty-related risks (e.g., mental health challenges, criminal justice system involvement). Finally, it is critical that researchers explore potential racial/ethnic disparities in these outcomes given the stark disparities that have been robustly and consistently documented between majority and minority children's experiences of maltreatment and child welfare involvement.

References

- Administration for Children and Families (2008). *Adolescents Involved with Child Welfare: A Transition to Adulthood.* NSCAW Report prepared by Research Triangle Institute. Washington, DC: US Department of Health and Human Services.
- Administration for Children and Families (2022a). Child Maltreatment, 2020. Washington, DC: US Department of Health and Human Services.
- Administration for Children and Families (2022b). Adoption and Foster Care Analysis (AFCARS) Report #29. Washington, DC: US Department of Health and Human Services.
- Assink, Mark, Spruit, Anouk, Schuts, Mendel, Lindauer, Ramón, van der Put, Claudia E., & Stams, Geert-Jan J. M. (2018). The intergenerational transmission of child maltreatment: A three-level meta-analysis. *Child abuse & neglect*, *84*, 131–145. https://doi.org/10.1016/j.chiabu.2018.07.037
- Assink, Mark, Claudia E. van der Put, Mandy W. C. M. Meeuwsen, Nynke M. de Jong, Frans J. Oort, Geert-Jan J. M. Stams, and Machteld Hoeve. (2019). Risk factors for child sexual abuse victimization: A meta-analytic review. *Psychological Bulletin* 145(5): 459–89.
- Bald, Anthony, Eric Chyn, Justine Hastings, and Margarita Machelett (2022). "The Causal Impact of Removing Children from Abusive and Neglectful Homes/" *Journal of Political Economy* 130 (7), 1919-1962.
- Baron, E. Jason and Max Gross (2022). "Is there a Foster Care to Prison Pipeline? Evidence from Quasi-Randomly Assigned Investigators." NBER Working Paper 29922
- Barth, R. P., Berrick, J. D., Garcia, A. R., Drake, B., Jonson-Reid, M., Gyourko, J. R., & Greeson, J. K. (2022). Research to consider while effectively re-designing child welfare services. *Research on Social Work Practice*, *32*(5), 483-498.
- Barth, R. P., Jonson-Reid, M., Greeson, J. K., Drake, B., Berrick, J. D., Garcia, A. R., ... & Gyourko, J. R. (2020). Outcomes following child welfare services: what are they and do they differ for black children? *Journal of public child welfare*, *14*(5), 477-499.
- Barth, R. P., Duncan, D. F., Hodorowicz, M. T., & Kum, H. C. (2010). Felonious arrests of former foster care and TANF-involved youth. *Journal of the Society for Social Work and Research*, *1*(2), 104-123.
- Berger, Lawrence M., and Sarah A. Font. (2015". "The role of the family and family-centered programs and polici"s." *The Future of children* 25, 155.
- Becker, Gary Stanley. 1991. A Treatise on the Family. Cambridge, MA: Harvard University Press.
- Berger, Lawrence M, Sarah A. Font, Kristen S. Slack, and Jane Waldfogel. 2017. "Income and child maltreatment in unmarried families: Evidence from the Earned Income Tax Credit." *Review of Economics of the Household* 15 (4): 1345–72.
- Berger, Lawrence M., and Jane Waldfogel. (2011). "Economic Determinants and Consequences of Child Maltreatment." Organization for Economic Cooperation and Development (OECD), OECD Social, Employment and Migration Working Paper No. 111.
- Biehl, Amelia M., and Brian Hill. 2018. "Foster care and the earned income tax credit." *Review of Economics of the Household* 16 (3): 661–80.
- Birckhead, T. R. (2012). Delinquent by reason of poverty. *Wash. UJL & 'ol'y*, 38, 53Boyd, R. (2014). African American disproportionality and disparity in child welfare: Toward a comprehensive conceptual framework. *Children and Youth Services Review*, 37, 15-27.

- Bramlett, M. D., Radel, L. F., & Chow, K. (2017). Health and well-being of children in kinship care: Findings from the National Survey of Children in Nonparental Care. *Child welfare*, 95(3), 41.
- Brown, Dan, and Elisabetta De Cao. (2020". "Child maltreatment, unemployment, and safety ne"s." *Unemployment, and safety nets*. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3543987.
- Brown, E. C. B., Garrison, M.M., Bao, H., Qu, P., Jenny, C., & Rowhani-Rahbar, A. (2019). Assessment of rates of child maltreatment in states with Medicaid expansion vs states without Medicaid expansion. JAMA Network Open, 2(6).
- Bullinger, Lindsey R., Analisa Packham, and Kerri Raissian. (2022). "The Effect of Universal and Unconditional Cash Transfers on Child Maltreatment." Paper presented at the Annual Meeting of the Association for Public Policy Analysis and Management, Washington, DC, November 16-19, 2022.
- Bullinger, L. R., Fleckman, J. M., & Fong, K. (2021). Proximity to SNAP-authorized retailers and child maltreatment reports. Economics & Human Biology, 42, 101015.
- Bullinger, L. R., Raissian, K. M., & Schneider, W. (2022). The power of the future: Intergenerational income mobility and child maltreatment in the United States. *Child Abuse & Neglect*, *130*, 105175.
- Bunting, L., Davidson, G., McCartan, C., Hanratty, J., Bywaters, P., Mason, W., & Steils, N. (2018). The association between child maltreatment and adult poverty—A systematic review of longitudinal research. *Child abuse & neglect*, 77, 121-133.
- Boyd, R. (2014). African American disproportionality and disparity in child welfare: Toward a comprehensive conceptual framework. *Children and Youth Services Review*, *37*, 15-27.
- California Evidence-Based Clearinghouse. Retrieved from https://www.cebc4cw.org/
- Cancian, Maria, Mi-Youn Yang, and Kristen S. Slack. 2013. "The effect of additional child support income on the risk of child maltreatment." *Social Service Review* 87 (3): 417–437.
- Casanueva, C., Dolan, M., & Smith, K.R. (2014). Disconnected Youth involved in Child Welfare. OPRE Report #2014-63, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Casillas, Katherine L., Angèle Fauchier, Bridget T. Derkash, and Edward F. Garrido. (201") "Implementation of evidence-based home visiting programs aimed at reducing child maltreatment: A meta-analytic revi"w." *Child abuse & neglect* 53, 64-80.
- Cheng, H. F., Stapleton, L., Kawakami, A., Sivaraman, V., Cheng, Y., Qing, D., ... & Zhu, H. (2022, April). How child welfare workers reduce racial disparities in algorithmic decisions. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems* (pp. 1-22).
- Child Welfare Information Gateway. (2019). Long-term consequences of child abuse and neglect. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau.
- Choi, MJ., Kim, J. Roper, A., LaBrenz, C., & Boyd, R. (2021). Racial disparities in assignment to alternative response. *Children and Youth Services Review*, 125. DOI: 10.1016/j.childyouth.2021.105988

- Coleman, K. L., & Wu, Q. (2016). Kinship care and service utilization: A review of predisposing, enabling, and need factors. *Children and Youth Services Review*, 61, 201-210.
- Coulton, C., Crampton, D., Irwin, M., Spilsbury, J., & Korbin, J. (2007). How neighborhoods influence child maltreatment: A review of the literature and alternative pathways. *Child Abuse & Neglect*, 31(11-12), 1117-1142.
- Covey HC, Menard S, Franzese RJ. (2013). Effects of adolescent physical abuse, exposure to neighborhood violence, and witnessing parental violence on adult socioeconomic status. *Child Maltreatment*, 18(2), 85–97.
- Cuccaro-Alamin, S., Foust, R., Vaithianathan, R., & Putnam-Hornstein, E. (2017). "Risk assessment and decision making in child protective services: Predictive risk modeling in context." *Children and Youth Services Review*, 79, 291-298.
- Currie, Janet, and Erdal Tekin (2012). "Understanding the Cycle: Childhood Maltreatment and Future Crime." *Journal of Human Resources* 47(2), 509-549.
- Currie, Janet, and Cathy Widom (2010). "Long-Term Consequences of Child Abuse and Neglect on Adult Economic Well-Being." *Child Maltreatment* 15(2), 111–120.
- Cutuli, J. J., Goerge, R. M., Coulton, C., Schretzman, M., Crampton, D., Charvat, B. J., ... & Lee, E. L. (2016). From foster care to juvenile justice: Exploring characteristics of youth in three cities. *Children and youth services review*, 67, 84-94.
- DeFina, R., & Hannon, L. (2013). The impact of mass incarceration on poverty. *Crime & Delinquency*, 59(4), 562-586.
- Dettlaff, A. J., & Boyd, R. (2022). The Causes and Consequences of Racial Disproportionality and Disparities. *Handbook of Child Maltreatment*, 221-237.
- Dettlaff, A. J., Rivaux, S. L., Baumann, D. J., Fluke, J. D., Rycraft, J. R., & James, J. (2011). Disentangling substantiation: The influence of race, income, and risk on the substantiation decision in child welfare. *Children and Youth Services Review*, *33*(9), 1630-1637.
- Dettlaff, A., Earner, I., & Phillips, S. (2009). Latino children of immigrants in the child welfare system: Prevalence, characteristics, and risk. *Children and Youth Services Review*, *31*(7), 775-783.
- Doyle, Joseph J. (2007). "Child Protection and Child Outcomes: Measuring the Effects of Foster Care." *American Economic Review* 97(5), 1583-1610.
- Doyle, Joseph J. (2008). "Child Protection and Adult Crime: Using Investigator Assignment to Estimate Causal Effects of Foster Care." *Journal of Political Economy* 116(4), 746-770.
- Drake, B., Jolley, J. M., Lanier, P., Fluke, J., Barth, R. P., & Jonson-Reid, M. (2011). Racial bias in child protection? A comparison of competing explanations using national data. *Pediatrics*, 127(3), 471-478.
- Duffee, James H., Alan L. Mendelsohn, Alice A. Kuo, Lori A. Legano, Marian F. Earls, Lance A. Chilton, Patricia J. Flanagan et al. (2017". "Early childhood home visiti"g." *Pediatrics* 140.
- Duncan, G., & Le Menestrel, S. (2019). A Roadmap to Reducing Child Poverty. Consensus Study Report. Washington, DC: National Academies Press.
- Eckenrode J, Smith EG, McCarthy ME, Dineen M. (2014). Income inequality and child maltreatment in the United States. Pediatrics, 133(3), 454–461.
- Edwards, V. J., Holden, G. W., Felitti, V. J., & Anda, R. F. (2003). Relationship between multiple forms of childhood maltreatment and adult mental health in community

- respondents: results from the adverse childhood experiences study. *American Journal of Psychiatry*, 160(8), 1453-1460.
- Ehrle, J., & Geen, R. (2002). Kin and non-kin foster care—findings from a national survey. *Children and Youth Services Review*, 24(1-2), 15-35.
- Elder, Glen H. 1974. Children of the Great Depression. Chicago, IL: University of Chicago Press.
- Fein, David J., and Wang S. Lee. 2003. "The impacts of welfare reform on child maltreatment in Delaware." *Children and Youth Services Review* 25 (1–2): 83–111.
- Font, S. A., Berger, L. M., & Slack, K. S. (2012). Examining racial disproportionality in child protective services case decisions. *Children and youth services review*, *34*(11), 2188-2200.
- Font, Sarah A., Maria Cancian, and Lawrence M. Berger (2019). "Prevalence and Risk Factors for Early Motherhood among Low-Income, Maltreated, and Foster Youth." *Demography* 56, 261-284.
- Font, Sarah A., Maria Cancian, Lawrence M. Berger, and Anna DiGiovanni (2021). "Patterns of Intergenerational Child Protective Services Involvement." *Child Abuse & Neglect* 99, January, 104247.
- Font, Sarah A. and Kathryn Maguire-Jack (2020a). "It's Not "Just Poverty": Educational, Social, and Economic Functioning among Young Adults Exposed to Childhood Neglect, Abuse, and Poverty." *Child Abuse & Neglect* 101, March, 104356.
- Font, Sarah A., and Kathryn Maguire-Jack. (2020b). "The scope, nature, and causes of child abuse and neglect." *The ANNALS of the American Academy of Political and Social Science* 692, 26-49.
- Fuller-Thomson, E., & Minkler, M. (2000). African American grandparents raising grandchildren: A national profile of demographic and health characteristics. *Health & Social Work*, 25(2), 109-118.
- Ginther, Donna K., and Michelle Johnson-Motoyama. (2017". "Do state TANF policies affect child abuse and negle"t." Paper presented at the APPAM ³9th Annual Fall Research Conference, Chicago, IL. Available at: https://www.econ.iastate.edu/files/events/files/gintherjohnsonmotoyama appam.pdf.
- Gleeson, J. (2012). What works in kinship care? In P. Curtis & G. Alexander (Eds.), *What works in child welfare*? (pp. 193-216). Washington, DC: Child Welfare League of America.
- Goodman, W. B., Dodge, K. A., Bai, Y., Murphy, R. A., & O'Donnell, K. (2021). Effect of a universal postpartum nurse home visiting program on child maltreatment and emergency medical care at 5 years of age: A randomized clinical trial. JAMA Network Open, 4(7), e2116024-e2116024.
- Green, B. L., Ayoub, C., Bartlett, J. D., Von Ende, A., Furrer, C., Chazan-Cohen, R., Vallotton, C., & Klevens, J. (2014). The effect of Early Head Start on child welfare system involvement: A first look at longitudinal child maltreatment outcomes. *Children & Youth Services Review*, 42, 127–135.
- Gross, Max, and E. Jason Baron (2022". "Temporary Stays and Persistent Gains: The Causal Effects of Foster Ca"e." *American Economic Journal: Applied Economics*, 14 (2): 170-99. DOI: 10.1257/app.20200204.
- Gubbels, Jeanne, Claudia E. van der Put, Geert-Jan JM Stams, Peter J. Prinzie, and Mark Assink. (2021". "Components associated with the effect of home visiting programs on child maltreatment: A meta-analytic revi"w." *Child Abuse & Neglect* 114, 104981.

- Ha, Yoonsook, Mary Elizabeth Collins, and David Martino. (2015". "Child care burden and the risk of child maltreatment among low-income working famili"s." *Children and Youth Services Review* 59, 19-27.
- Harris, M. S., & Skyles, A. (2008). Kinship care for African American children: Disproportionate and disadvantageous. *Journal of Family Issues*, 29(8), 1013-1030.
- Herz, D., Lee, P. Lutz, L., Stewart, M., Tuell, J., and Wiig, J. (2012). Addressing the needs of multi-system youth: Strengthening the connection between child welfare and juvenile justice. *The Center for Juvenile Justice Reform* and *Robert F. Kennedy Children's Action Corps*. https://drive.google.com/file/d/1GngIUSjiX6svVJHPRVZR69Tf74 r5d9u/view
- Hirsh, R. A., Dierkhising, C. B., Herz, D. C. (2018). Educational risk, recidivism, and service access among youth involved in both the child welfare and juvenile justice systems. *Children and Youth Services Review*, 85, 72-80. https://doi.org/10.1016/j.childyouth.2017.12.001
- Jaffee, S. R., Ambler, A., Merrick, M., Goldman-Mellor, S., Odgers, C. L., Fisher, H. L., ... & Arseneault, L. (2018). Childhood maltreatment predicts poor economic and educational outcomes in the transition to adulthood. *American journal of public health*, 108(9), 1142-1147.
- Jaffee, S. & Maikovich-Fong A. (2013). Child maltreatment and risk for psychopathology. In: Beauchaine TP, Hinshaw SP, eds. *Child and Adolescent Psychopathology 2nd ed.* (pp. 171-196). Hoboken, NJ: Wiley.
- Johnson-Motoyama, M. et al. (2022). Association between state Supplemental Nutrition Assistance Program policies, child protective services involvement, and foster care in the US, 2004-2016. JAMA Network Open, 5(7):e2221509.
- Jones Harden, B., & Slopen, N. (2022). Inequitable Experiences and Outcomes in Young Children: Addressing Racial and Social-Economic Disparities in Physical and Mental Health. *Annual Review of Developmental Psychology*, 4.
- Jonson-Reid, M., Drake, B., & Kohl, P. L. (2009). Is the overrepresentation of the poor in child welfare caseloads due to bias or need?. *Children and Youth Services Review*, 31(3), 422-427.
- Kaplow, J. B., & Widom, C. S. (2007). Age of onset of child maltreatment predicts long-term mental health outcomes. *Journal of abnormal Psychology*, *116*(1), 176.
- Kennedy, Reeve, Marina H. Potter, and Sarah A. Font (2022). "A Meta-Regression of Racial Disparities in Wellbeing Outcomes During and After Foster Care." *Journal of Violence, Trauma, & Abuse.* https://doi.org/10.1177/15248380221111481
- Kim, Hyunil, Christopher Wildeman, Melissa Jonson-Reid, and Brett Drake (2017). "Lifetime Prevalence of Investigating Child Maltreatment among US Children." *American Journal of Public Health* 107 (2), 274-280.
- Kim, H., & Drake, B. (2018). Child maltreatment risk as a function of poverty and race/ethnicity in the USA. *International journal of epidemiology*, 47(3), 780-787.
- Klein, S., Fries, L., & Emmons, M. M. (2017). Early care and education arrangements and young children's risk of foster placement: Findings from a National Child Welfare Sample. *Children & Youth Services Review*, 83, 168–178.
- Klevens, J., Schmidt, B., Luo, F., Xu, L., Ports, K.A., & Lee, R.D. (2017). Effect of the Earned Income Tax Credit on hospital admissions for pediatric abusive head trauma, 1995-2013. *Public Health Reports*, *132*(4), 505-511.

- Kovski, N.L., Hill, H.D., Mooney, S.J., Rivara, F. P., Morgan, E.R., & Rowhani-Rahbar, A. (2022a). Association of state-level Earned Income Tax Credits with rates of reported child maltreatment, 2004–2017. *Child Maltreatment*, 1077559520987302.
- Kovski, N. L., Hill, H. D., Mooney, S. J., Rivara, F. P., & Rowhani-Rahbar, A. (2022b). Short-term effects of tax credits on rates of child maltreatment reports in the United States. Pediatrics, 150(1), e2021054939.
- Lee, B. J., & Mackey-Bilaver, L. (2007). Effects of WIC and food stamp program participation on child outcomes. Children & Youth Services Review, 29(4), 501-517.
- Lindo, J. M., Schaller, J. & Hansen, B. (2018). Caution! Men not at work: Gender-specific labor market conditions and child maltreatment. *Journal of Public Economics*, *163*, pp. 77-98, 10.1016/j.jpubeco.2018.04.007
- Maguire-Jack, Kathryn, Kelly M. Purtell, Kathryn Showalter, Sheila Barnhart, and Mi-Youn Yang. 2019. "Preventive benefits of U.S. childcare subsidies in supervisory child neglect." *Children & Society* 33 (2): 185–94.
- Maguire-Jack, K., Yoon, S., & Hong, S. (2022). Social cohesion and informal social control as mediators between neighborhood poverty and child maltreatment. *Child maltreatment*, 27(3), 334-343.
- Masarik, A. S., & Conger, R. D. (2017). Stress and child development: A review of the Family Stress Model. *Current opinion in psychology*, *13*, 85-90.
- McGinty, E. E., Nair, R., Assini-Meytin, L. C., Stuart, E. A., & Letourneau, E. J. (2022). Impact of Medicaid expansion on reported incidents of child neglect and physical abuse. *American Journal of Preventive Medicine*, 62(1), e11-e20. https://www.sciencedirect.com/science/article/abs/pii/S0749379721004049
- McLaughlin, M. (2017). Less money, more problems: How changes in disposable income affect child maltreatment. *Children & Youth Services Review*, 67, 315-321.
- Mersky, J. P., & Topitzes, J. (2010). Comparing early adult outcomes of maltreated and non-maltreated children: A prospective longitudinal investigation. *Children and Youth Services Review*, 32(8), 1086-1096.
- Mersky, J. P., Topitzes, J. D., & Reynolds, A. J. (2011). Maltreatment prevention through early childhood intervention: A confirmatory evaluation of the Chicago Child–Parent Center preschool program. *Children & Youth Services Review*, 33(8), 1454–1463.
- Metzler M, Merrick MT, Klevens J, Ports KA, & Ford DC. (2017). Adverse childhood experiences and life opportunities: shifting the narrative. *Children and Youth Services Review*, 72, 141-149.
- Miller-Cribbs, J. E., & Farber, N. B. (2008). Kin networks and poverty among African Americans: Past and present. *Social work*, *53*(1), 43-51.
- Molina, K. M., Alegría, M., & Chen, C. N. (2012). Neighborhood context and substance use disorders: A comparative analysis of racial and ethnic groups in the United States. *Drug and alcohol dependence*, 125, S35-S43.
- Mulder, Tim M., Kimberly C. Kuiper, Claudia E. van der Put, Geert-Jan J. M. Stams, and Mark Assink. (2018). Risk factors for child neglect: A meta-analytic review. *Child Abuse & Neglect* 77 (March): 198–210.
- National Home Visiting Resource Center. 2021 Home Visiting Yearbook. Retrieved from: https://nhvrc.org/yearbook/2021-yearbook/

- Negriff, S. (2020). ACEs are not equal: Examining the relative impact of household dysfunction versus childhood maltreatment on mental health in adolescence. *Social Science & Medicine*, 245, 112696.
- Pac, Jessica. (2021). "Early Childhood Education and Care Programs in the United States: Does Access Improve Child Safety?" *Social Service Review* 95, 66-109.
- Pac, Jessica. (2019). *Three Essays on Child Maltreatment Prevention*. Dissertation, Columbia University. Available at: https://www.proquest.com/docview/2235352545?pq-origsite=gscholar&fromopenview=true.
- Pac, Jessica, Sophie Collyer, Lawrence M. Berger, Kirk O'Brien, Elizabeth Parker, Peter Pecora, Whitney Rostad, Jane Waldfogel, and Christopher Wimer. (in press). "The Effects of Child Poverty Reductions on Child Protective Services Involvement." *Social Service Review*.
- Paxson, Christina, and Jane Waldfogel. (2003). Welfare reforms, family resources, and child maltreatment. *Journal of Policy Analysis and Management* 22, 85-113.
- Paxson, Christina, and Jane Waldfogel. (2002). Work, welfare, and child maltreatment. *Journal of Labor Economics* 20, 435-474.
- Pelton, L. H. (2015). The continuing role of material factors in child maltreatment and placement. *Child Abuse & Neglect*, *41*, 30-39.
- Prinz, Ronald J., Matthew R. Sanders, Cheri J. Shapiro, Daniel J. Whitaker, and John R. Lutzker. (2009). "Population-based prevention of child maltreatment: The US Triple P system population trial." *Prevention science* 10, 1-12.
- Putnam-Hornstein, E., Ahn, E., Prindle, J., Magruder, J., Webster, D., & Wildeman, C. (2021). Cumulative rates of child protection involvement and terminations of parental rights in a California birth cohort, 1999–2017. *American journal of public health*, 111(6), 1157-1163.
- Putnam-Hornstein, E., Needell, B., King, B., & Johnson-Motoyama (2013). Racial and ethnic disparities: A population-based examination of risk factors for involvement with child protective services. *Child abuse & neglect*
- Quillian, L. (2012). Segregation and poverty concentration: The role of three segregations. *American Sociological Review*, 77(3), 354-379.
- Raissian, Kerri M. 2015. "Does unemployment affect child abuse rates? Evidence from New York State." *Child Abuse & Neglect* 48 (October): 1–12.
- Raissian, Kerri M., and Lindsey Rose Bullinger. (2017). Money matters: Does the minimum wage affect child maltreatment rates? *Children and youth services review* 72, 60-70.
- Reynolds, A. J., & Robertson, D. L. (2003). School–based early intervention and later child maltreatment in the Chicago longitudinal study. *Child Development*, 74(1), 3-26.
- Rittenhouse, Katherine. (2022). Income and Child Maltreatment: Evidence from a Discontinuity in Tax Benefits. Manuscript, University of California, San Diego, Department of Economics. Available at: https://krittenh.github.io/katherine-rittenhouse.com/RittenhouseJMP_current.pdf.
- Rodenborg, N. A. (2004). Services to African American children in poverty: Institutional discrimination in child welfare?. *Journal of Poverty*, 8(3), 109-130.
- Rostad W.L., Ports K.A., Tang S., & Klevens, J. (2020). Reducing the number of children entering foster care: Effects of state Earned Income Tax Credits. *Child Maltreatment*, 25(4), 393-397.

- Rufa, A. K., & Fowler, P. J. (2016). Kinship foster care among African American youth: Interaction effects at multiple contextual levels. *Journal of social service research*, 42(1), 26-40.
- Ryan, J. P., Hong, J. S., Herz, D., & Hernandez, P. M. (2010). Kinship foster care and the risk of juvenile delinquency. *Children and Youth Services Review*, 32(12), 1823-1830.
- Ryan, J. P., Perron, B. E., & Huang, H. (2016). Child welfare and the transition to adulthood: Investigating placement status and subsequent arrests. *Journal of youth and adolescence*, 45(1), 172-182.
- Sama-Miller, Emily, Lauren Akers, Andrea Mraz-Esposito, Rebecca Coughlin, and Marykate Zukiewicz. (2017). *Home visiting evidence of effectiveness review: Executive summary*. Mathematica Policy Research. Available at: https://econpapers.repec.org/paper/mprmprres/ab92c1547bc142a6815d64f332358eb3.ht m.
- Sandner, Malte, and Stephan L. Thomsen. *Preventing child maltreatment: Beneficial side effects of public childcare provision*. No. 669. Hannover Economic Papers (HEP), 2020.
- Schilling, Samantha, Paul Lanier, Roderick A. Rose, Meghan Shanahan, and Adam J. Zolotor. (2020). A quasi-experimental effectiveness study of Triple P on child maltreatment." *Journal of family violence* 35, 373-383.
- Schneider, William, Lindsey Rose Bullinger, and Kerri M. Raissian. (2022). How does the minimum wage affect child maltreatment and parenting behaviors? An analysis of the mechanisms. *Review of Economics of the Household* 20, 1119-1154.
- Slack, Kristen S., Bong Joo Lee, and Lawrence M. Berger. (2007). "Do welfare sanctions increase child protection system involvement? A cautious answer." *Social Service Review* 81, 207-228.
- Southerland, D., Casanueva, C. E., & Ringeisen, H. (2009). Young adult outcomes and mental health problems among transition age youth investigated for maltreatment during adolescence. *Children and Youth Services Review*, *31*(9), 947-956.
- Stith, Sandra M., Ting Liu, L. Christopher Davies, Esther L. Boykin, Meagan C. Alder, Jennifer M. Harris, Anurag Som, Mary McPherson, and J. E. M. E. G. Dees. (2009). Risk factors in child maltreatment: A meta-analytic review of the literature. *Aggression and Violent Behavior* 14 (1): 13–29.
- Taylor, E. P., Di Folco, S., Dupin, M., Mithen, H., Wen, L., Rose, L., & Nisbet, K. (2020). Socioeconomic deprivation and social capital in kinship carers using a helpline service. *Child & Family Social Work*, 25(4), 845-855.
- Thiede, B. C., Brooks, M. M., & Jensen, L. (2021). Unequal From the Start? Poverty Across Immigrant Generations of Hispanic Children. *Demography*, 58(6), 2139-2167.
- Thomas, M. M., & Waldfogel, J. (2022). What kind of "poverty" predicts CPS contact: Income, material hardship, and differences among racialized groups. *Children and youth services review*, 136, 106400.
- van der Put, Claudia E., Mark Assink, Jeanne Gubbels, and Noëlle F. Boekhout van Solinge. (2018). "Identifying effective components of child maltreatment interventions: A meta-analysis." *Clinical child and family psychology review* 21, 171-202.
- van IJzendoorn, Marinus H., Marian J. Bakermans-Kranenburg, Barry Coughlan, and Sophie Reijman.(2020). Annual research review: Umbrella synthesis of meta-analyses on child maltreatment antecedents and interventions: Differential susceptibility perspective on risk and resilience. *Journal of Child Psychology and Psychiatry* 61(3): 272–90.

- Wadsworth, M. E., Evans, G. W., Grant, K., Carter, J. S., & Duffy, S. (2016). Poverty and the development of psychopathology. In D. Cicchetti (Ed.), *Developmental psychopathology: Risk, resilience, and intervention* (pp. 136–179). John Wiley & Sons, Inc.. https://doi.org/10.1002/9781119125556.devpsy404
- Watt, T., & Kim, S. (2019). Race/ethnicity and foster youth outcomes: An examination of disproportionality using the national youth in transition database. *Children and Youth Services Review*, 102, 251-258.
- Wildeman, C. & Emanuel, N. (2014). Cumulative risks of foster care placement by age 18 for U.S. children, 2000–2011. *PLOS One*. https://doi.org/10.1371/journal.pone.0092785
- Wildeman, Christopher, and Peter Fallesen. (2017). The effect of lowering welfare payment ceilings on children's risk of out-of-home placement. *Children and youth services review* 72, 82-90.
- Winokur, M. A., Crawford, G. A., Longobardi, R. C., & Valentine, D. P. (2008). Matched comparison of children in kinship care and foster care on child welfare outcomes. *Families in society*, 89(3), 338-346.
- Winokur, M. A., Holtan, A., & Batchelder, K. E. (2018). Systematic review of kinship care effects on safety, permanency, and well-being outcomes. *Research on Social Work Practice*, 28(1), 19-32.
- Wulczyn, F. (2020). Foster care in a life course perspective. *The ANNALS of the American Academy of Political and Social Science*, 692(1), 227-252.
- Xu, Y., Bright, C. L., Barth, R. P., & Ahn, H. (2021). Poverty and economic pressure, financial assistance, and children's behavioral health in kinship care. *Child maltreatment*, 26(1), 28-39.
- Yang, Mi-Youn, Kathryn Maguire-Jack, Kathryn Showalter, Youn Kyoung Kim, and Kristen Shook Slack. (2019). Child care subsidy and child maltreatment. *Child & Family Social Work* 24 (4): 547–54.
- Yoon, S., Quinn, C. R., Shockley McCarthy, K., & Robertson, A. A. (2021). The effects of child protective services and juvenile justice system involvement on academic outcomes: Gender and racial differences. *Youth & Society*, *53*(1), 131-152.
- Yoshikawa, H., Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on the mental, emotional, and behavioral health of children and youth: implications for prevention. *American Psychologist*, 67(4), 272.
- Zhai, Fuhua, Jane Waldfogel, and Jeanne Brooks-Gunn. (2013). Estimating the effects of Head Start on parenting and child maltreatment. *Children and Youth Services Review* 35, 1119-1129.
- Zielinski D.S. (2009). Child maltreatment and adult socioeconomic well-being. *Child Abuse and Neglect*, *33*(10), 666–678.