

The Interdependence of Families, Communities, and Children's Health

Public Investments That Strengthen Families and Communities, and Promote Children's Healthy Development and Societal Prosperity

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ABSTRACT | *Children's development of cognitive, affective, and behavioral capacities is best promoted when the contexts that surround them are strong and healthy. Children are embedded in families, who are, in turn, embedded in communities. Policies or programs that strengthen families and communities by addressing the social determinants of health also promote children's healthy development, and ultimately national prosperity. We provide examples of housing, education, and income policies that address the social determinants of health. We suggest that their potency is augmented when they also strengthen the collective efficacy of families and communities, thus laying the foundation for children's long-term, healthy development. We urge a concerted focus on these broad social policies as a key component of any children's health policy.*

Introduction

Federal and state policies that invest in families and strengthen communities create the enabling conditions for child development and, by extension, our nation's prosperity. These policies can directly target children (for example, the Children's Health Insurance Program [CHIP] and the Early and Periodic Screening, Diagnosis, and Treatment benefits under Medicaid), or they can indirectly support families and communities (for example, through income support programs or housing policies). Child-focused policies such as CHIP raised the standard for children's health care coverage, and consequently 95 percent of children nationally now have public or private health insurance [1]. Yet, critical as these policies are, we argue in this paper that children's development of cognitive, affective, and

behavioral capacities requires more than investment in programs *directly* targeting children's health.

Children's development is best promoted when, in addition to these direct investments, policies and programs that strengthen families and communities are supported. Children are embedded in families, who are, in turn, embedded in neighborhoods and communities. Consequently, policies or programs that strengthen the ecologies of children—i.e., their families and their communities—also promote children's healthy development. Policies and programs investing in family and community are often more cost-effective than services provided only to children, because they affect a broader population of children and the adults in their lives, and are more likely to have longer-term effects. Strengthened family and community contexts

increase the capacity for community cohesiveness, thus activating a sense of meaning and purpose. This process, called collective efficacy, can be a lens through which to assess the contributions of federal and state policy investments, even when those policies do not directly target children. We use this lens to review major federal and state policies targeting social determinants of health, and the evidence regarding their effect, and describe how these policies and programs can strengthen family and community agency or purpose, and therefore can influence children's development.

Strengthening Family and Community Capacity: A Foundation in the Social Determinants of Health Model

The social determinants of health (SDOH) model has become a powerful explanatory construct, a meta-explanation for how certain conditions and circumstances that surround individual growth and development are influenced by the distribution of wealth and resources at local, national, and even global levels. This construct has become a cornerstone for *Healthy People 2020*, and accords with the World Health Organization's (WHO) Commission on Social Determinants of Health. A growing body of research identifies social factors as being at the root of many of the nation's and the world's health inequalities [2,3]. Because social determinants are relevant to all forms of disease, health status should be of concern to policy makers in every sector (such as housing, income, and education), and not only to those involved in health policy [2]. There are other national and global calls for attention to inequalities in health and the need to strengthen health systems and relieve poverty by taking concerted action *directly* on the social determinants of health [3,4,5].

The SDOH model is important in its focus on global health for *all* individuals. We focus here specifically on children's healthy development, and have selected one framework that is compatible with and builds on the SDOH literature—the Framework for Children's Health Promotion, developed by Mistry et al. [6]. The work of Mistry, concordant with Bronfenbrenner and others who looked at the relationship of social contexts to individual behavior [2,7,8,9], arises from the premise that early childhood has the potential to have long-term effects; therefore a crucial factor in optimizing health in this developmental period is building the *capacities of families and communities*, which includes

access to community-based early childhood enrichment services (for example, early care and education, home visiting, and parent support programs) [10,11]. These capacities, in turn, build the foundations for life-long health in early childhood, a premise promoted strongly by the Institute of Medicine in the *Neurons to Neighborhoods* report [12]. The Mistry et al. framework (see *Figure 1*) explicitly links policies to their intended health outcomes by showing how the capacities of families and communities provide the foundation for ensuring optimal environments and experiences for children. Policies, such as those requiring seat belts, lead-free housing, minimum wages, and smoke-free environments, promote better health outcomes for children and families. This framework, which draws on the work of many others, including Chamberlin [13,14] and Shonkoff, Boyce, and McEwen [15], illustrates the importance of acknowledging that children exist within a system that is affected by multiple levels of influence [6,16].

The Foundations of Collective Efficacy and Its Importance for Communities

Collective efficacy refers to the way in which social cohesion among families, communities, and/or neighborhoods activates a sense of purpose in intervening for a common social good [8]. Rather than viewing neighborhoods as simply collections of individual attributes of specific people, collective efficacy suggests that social learning and self-efficacy activate a sense of purpose that strengthens the contexts in which individuals grow and thrive. For families with children, this social cohesion can be a very influential factor in children's healthy development [17], because social cohesion creates safer environments.

Many health problems cluster together at the neighborhood and community level, as documented in studies by Sampson and others [18]. These include child maltreatment, infant mortality, low birth weight, violence, and the risk of premature adult death. Concentrated poverty, family disruption, poor-quality housing, racial segregation, and residential instability are related to poor health outcomes; many of these are a result of decades-long federal policies and social injustices that still persist today [19]. Experimental studies have found a direct association between social contexts and children's physical and mental health [2,20,21,22]. The quality of these social contexts, when there is a sense

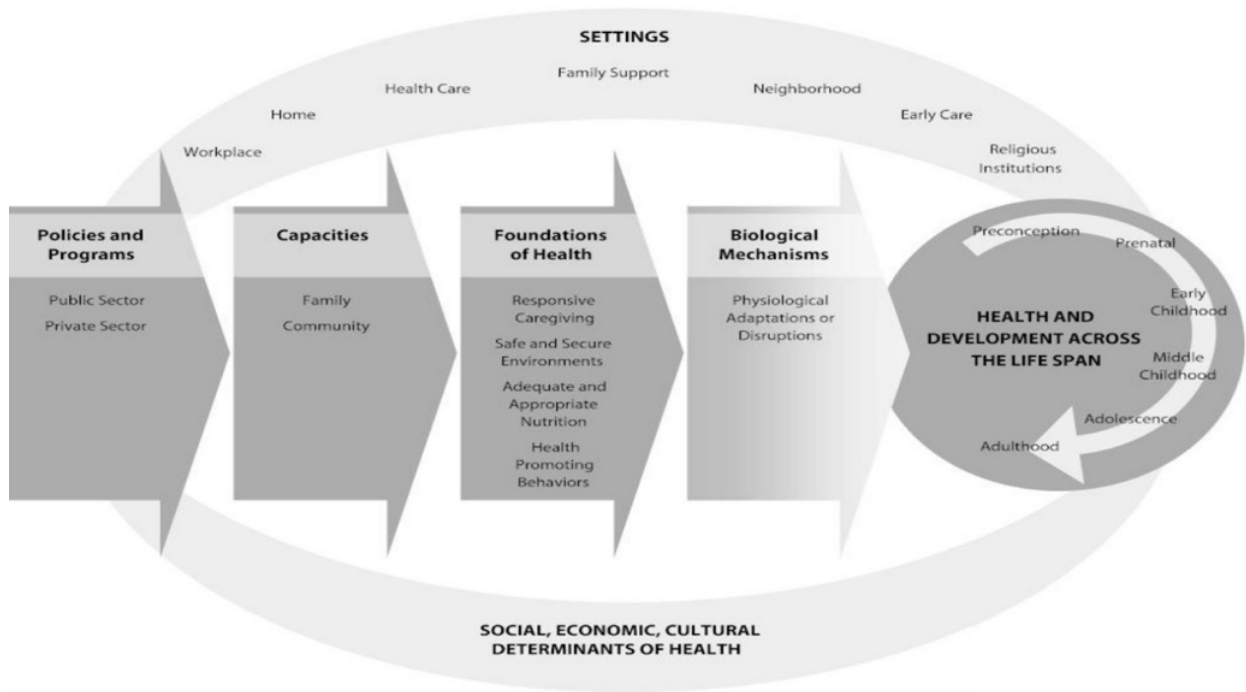


Figure 1 | A New Framework for Childhood Health Promotion: The Role of Policies and Programs in Building Capacity and Foundations of Early Childhood Health

SOURCE: Mistry, K. *American Journal of Public Health*, September 2012; 102(9): 1688-1696. Reprinted with permission from The Sheridan Press on behalf of the American Public Health Association.

of community agency or purpose, is collective efficacy. It provides a useful and intuitive way to think about how policies that target children’s ecologies may influence children *directly*, that is, how policies targeting social determinants may actually have their intended effect.

Practically speaking, collective efficacy asks the question, Can individuals work together to accomplish their shared goals? This question contains three components for consideration: (1) whether people *want* to work together and trust one another; (2) whether they have the *shared knowledge* of how to achieve their goals; and (3) whether they have *access* to the resources, both in time and money, to accomplish their goals. To the extent that communities are made up of families raising children, the answers to these questions affect the health and well-being of those children.

The concept of collective efficacy can be used to evaluate the potential for federal or state policies to affect children’s health, even when those policies do not directly address children’s health. This approach is consistent with the public health emphasis on the aforementioned social determinants of health framework adopted by the World Health Organization, as

outlined in the United States Department of Health and Human Services’ *Healthy People 2020* and the Centers for Disease Control’s *Essentials for Childhood*, and the work of the Maternal and Child Health Bureau and Health Resources and Services Administration’s Infant Mortality Collaborative Improvement and Innovation Network [3,23,24].

Because the Mistry framework and the explanatory idea of collective efficacy are based upon decades of empirical research, using this lens for assessing policies can help communities make empirically informed decisions about what investments will promote community prosperity and children’s health. In other words, policies and programs directed at adults can also benefit children, and thus improve the economic future of the country as a whole.

Federal or State Policies and Programs That Indirectly Improve Children’s Healthy Development by Targeting Social Determinants

In the remainder of this paper, we provide examples of specific housing, social, and income policies and programs that have the potential to strengthen the

collective efficacy of families and communities, and thus strengthen the foundations of health for children and for the nation. These are (1) federal housing programs and policies that increase community capacity to provide improved housing conditions and strengthen family housing security through reduced-cost housing—specifically, the Moving to Opportunity for Fair Housing (MTO) demonstration program; (2) federal tax credit programs, such as the Earned Income Tax Credit program, a federal tax benefit for working people with low to moderate incomes; (3) federal and state income-supplementation programs aimed at lifting families out of poverty and employment benefits policies (for example, maternal and paternal leave) that strengthen family contexts; (4) block grants supporting maternal health, child care, and parenting; and (5) federal and state programs supporting two-generation social policies.

(1) The Department of Housing and Urban Development's (HUD) programs and policies

HUD sponsors a number of programs that provide housing assistance to low-income households: vouchers (i.e., housing vouchers for the private market), project-based rental assistance (i.e., subsidized rent in privately owned buildings), and public housing (i.e., subsidized rent in publicly owned buildings). There are also several HUD programs that seek to increase *community* capacity to provide improved housing conditions, and strengthen *family* housing security through reduced-cost housing. For example, neighborhood revitalization programs, such as the Choice Neighborhoods program, fund locally driven strategies to address struggling neighborhoods through a comprehensive approach to neighborhood transformation. The Choice Neighborhoods program addresses not only housing, but also people (for example, employment) and neighborhoods, via collaborative partnerships among local leaders, residents, and other stakeholders, such as business owners, city agencies, nonprofit organizations, private developers, public housing authorities, schools, and police [25]. This type of comprehensive, collaborative program may be ideal for promoting healthy development in children because it reinforces the *collective work* that adults within neighborhoods can do, in a shared way, to improve the living conditions for the entire population.

Another program aimed at strengthening family housing security and capacity is the Moving to

Opportunity for Fair Housing (MTO) demonstration program. Research findings from the 10-year demonstration provide data on how improving families' socioeconomic environment has a *direct* and *substantial effect* on their *health* (for example, fewer asthma attacks and injuries) and *behavioral outcomes* (such as lower levels of violent offending among juveniles), including improvement in the general health status and mental health of household heads [21,26,27,28], as well as increased earnings later in life for children moving to these less-impooverished neighborhoods before the age of 13 [29]. Interestingly, some negative effects of MTO were reported by sex (relocation to a more stable environment had negative effects on boys, owing to differences in social adaptability) [30]. With respect to educational outcomes, some studies have shown that housing policies that increase access to already high-performing, low-poverty schools (rather than investing in high-poverty schools to bring them up to low-poverty levels) can help boost children's educational outcomes [31].

Programs such as the MTO demonstration program can be seen not just as a way to improve the availability of safe and affordable housing—one of the building blocks of healthy child development—but also as contributing to future prosperity because of the documented effects on both child development and education. For underresourced communities in particular, the private sector has little incentive to take responsibility for community development, thus leaving families, as well as entire neighborhoods, without access to safe and affordable housing, and promoting an individualistic response (i.e., everyone for themselves). Programs such as MTO enhance the capacity for collective action and instill a sense of community purpose, thus potentially mobilizing collective efficacy.

(2) Earned Income Tax Credit Program

The Earned Income Tax Credit (EITC) is a federal benefit for working people with low to moderate incomes; 26 states and the District of Columbia also have state-level EITC programs. Income and family size determines the amount of the EITC. (See <https://www.eitc.irs.gov/eitc-central/about-eitc/income-limits-and-range-of-eitc/income-limits-and-range-of-eitc> for income limits and ranges of earned income tax credits.) The goal of the program is to encourage and reward work, offset federal payroll and income taxes, and raise living standards. EITC is one of the largest antipoverty

government programs: in tax year 2015, more than 27 million people received about \$67 billion in EITC [32], and the average amount of EITC paid out (for tax year 2015) was more than \$2,455 per claim. The program has a high participation rate; four of five people eligible for the EITC claim it [33].

Recent research shows that EITC and the Child Tax Credit, another IRS program, greatly reduce poverty for working families. Combined, these working family credits lifted nearly 10 million people out of poverty—including 5 million children (2013 data), and made more than 20 million other people less poor [34]. The EITC expansions of the 1990s appear to be the leading single factor explaining female family heads' *increased* employment between 1993 and 1999, lifting families out of poverty [34]. For children raised in families receiving the higher levels of EITC under the 1990s expansions, birth outcomes, such as premature birth and birth weight, were better, compared with birth outcomes for families receiving the lower levels of EITC [35]. In addition, educational gains have been reported for families receiving higher levels of EITC; studies have found that children in low-income families that received larger state or federal EITCs score better on reading and math tests, compared with children from largely similar families that do not receive large credit expansions. These children are more likely to finish high school and attend college [36].

These tax credit programs enable families to have sufficient resources to live, work, and engage in their communities in meaningful ways, thus activating a sense of community agency or purpose. This contributes to children's healthy development and their future possibilities.

(3) Income supplementation and employment benefit programs

Health outcomes are highest in states with minimum wage laws and higher tax credits for the poor [37]. States with more generous levels of Temporary Assistance for Needy Families (TANF) also show better child health outcomes [38]. Income supplementation to parents is associated with decreases in children's behavior problems [39]. One experimental study showed that an additional \$4,000 per year for the poorest households increased educational attainment by age 21 and reduced having ever committed a minor crime at ages 16-17 by 22 percent. Further, evidence suggested that improved parental quality was a likely mechanism for the change [40,41]. Another income supplement

intervention that moved families out of poverty reported major effects on children's conduct and oppositional disorders, but not anxiety and depression [42]. This income augmentation occurred when a casino was built, affecting some families participating in an ongoing longitudinal study of children's psychiatric disorders. This naturalistic experiment thus enabled the research team to assess the effect of income supplementation on the developmental course of children's mental disorders.

Employment benefits to parents in the form of paid or unpaid maternity leave, paternity leave, or family and medical leave allow one or both parents to stay at home with young children during a critical period in their growth and development. This paid leave affects not only children's physical health and mental health, but the physical health and mental health of their mothers and fathers. Although longitudinal studies have not been conducted on the effect of paid maternal leave on children, a recent research review (including international studies) suggested that paid maternity leave provided maternal health benefits, though these benefits varied, depending on the length of leave [43]. This finding was echoed in a U.S.-based study that showed that policies supporting *longer* family leave benefit maternal mental health [44,45,46]. Likewise, longer paternity leaves and increased time fathers spend caring for their very young children is associated with their children's higher cognitive test scores [47,48], and there is some evidence for improved child mental health outcomes as well [49].

Finally, although research conducted on the effects of *unpaid* maternity leave taken under provisions of the Family and Medical Leave Act show positive effects on the health of very young children [50], most low-income, unmarried mothers cannot afford to take this unpaid leave, although TANF can be used as a kind of maternity leave [51,52]. Even in the face of nearly two decades of research and numerous studies showing that dedicated parental time with their young children in the earliest months of life confers significant benefits to child health, the United States is the *only first-world country* without a *formal* national policy providing employees paid time off when they become new parents [53].

Like the tax credit and the housing policies and programs, these income and employment supports reduce some of the social determinants of compromised health and, importantly, improve the opportunities for families and communities to develop a sense of shared

meaning and purpose. With a safety net of basic income to meet their immediate needs, communities can thus focus on building neighborhood capacity to handle setbacks and crises when they occur. Thus, these income supplementation and employment benefit policies and programs create the conditions for establishing the shared values that define collective efficacy.

(4) State block grants and programs supporting parents

The Title V Maternal and Child Health block grant [54] supports policies and programs in every state that promote healthy families, positive parenting, and community conditions that improve the health of women, infants, children, and youth. Funded in 1935 as part of the Social Security Act, the Title V block grant requires a statewide needs assessment, family and community engagement, and performance measurement to track program [55,56] and policy implementation and outcomes. Most of the funds in states are spent on systems-level development of programs and policies that support healthy behaviors and community/state programs that promote better health of children and families. Under this federal law, one-third of the funds must be spent on children and youth with special health care needs, and one-third must be spent on preventive and primary care for children [57]. The Title V program has had a legacy of program accomplishments for children and families since its inception in 1935 [58]. In addition, funds from the federal Title V support multidisciplinary training programs, such as the Leadership Education in Neurodevelopmental and Related Disabilities, to improve the health of infants, children, and adolescents with disabilities.

The Child Care and Development Block Grant (CCDBG) allows each state to develop child care programs and policies that best match the needs of the parents in their states, and improve the quality of child care, via federal benchmarks, for low-income families [59]. Importantly, the CCDBG promotes parental choice that empowers working parents to make their own decisions regarding the child care services they choose. Proposed changes to this program would provide low-income parents a choice, via a stay-at-home subsidy, about whether to work or stay home with their child, which promotes the opportunity for them to have meaningful roles in their communities, thus supporting a personal sense of competence that affects their parenting practices [60].

The Maternal Infant Early Childhood Home Visiting (MIECHV) federal program, which is authorized under Title V of the Social Security Act [61], along with the Maternal and Child Health block grant, promotes child and family development through its home-visiting program, which includes evidence-based parenting information for new families. MIECHV provides states with funds for identified evidence-based nurse home-visiting models (17 approved in 2017) from which to choose to promote positive outcomes for at-risk families in their states [62]. These programs provide direct in-home services, supports, and resources and referrals to families. Home-visiting programs can improve outcomes for low-income, unmarried mothers for up to 15 years after the birth of the first child, including reductions in the number of subsequent pregnancies, the use of welfare, child abuse and neglect, and criminal behavior [63]. A recent mediation reanalysis of the mechanisms by which nurse home visitation led to reductions in substantiated child maltreatment found that these outcomes can be partly explained by the program's positive effects on maternal outcomes, including pregnancy planning and economic self-sufficiency [64].

These block grants focus on strengthening parenting capacities by providing education, training, and services (child care), thus enabling parents to work and to engage in meaningful roles in their communities. Moreover these grants provide special supports for the most vulnerable children (i.e., low-income, developmentally disabled). Families receiving high-quality child care and evidence-based parenting programs are more likely to be able to remain employed, and their children are more likely to be ready for school; new data shows improved school readiness for children of families receiving services through home-visiting programs [65]. Supporting parents thus helps support communities by positively affecting schools, public safety, and neighborhood development.

(5) Federal and state programs supporting two-generation social policies

Research shows that states where the ratio of social service and public health spending to health spending (sum of Medicare and Medicaid spending) is higher have better health outcomes for their population; this includes improved rates of obesity, asthma, mortality, and mentally “unhealthy days” [66]. These findings are compatible with the development of what are called two-generation social policies [67]. This approach is

based on research demonstrating how conditions that affect parents, families, and communities also influence children's development, and that this is a bi-directional influence. For example, since parenting capacities can be reduced by parents' physical and mental health problems, health insurance for parents affects the well-being of their children. From the other direction, children's experience of stable, high-quality early care and education supports both children's early learning and parents' work effort. This two-generation approach is being debated within state legislatures [68]. Other federal and state health initiatives designed to improve adult health include "place-based" initiatives (such as Promise Neighborhoods and Best Babies Zone). These are designed to create a community environment that promotes and protects the health of adults, and simultaneously create healthier communities [69,70,71].

These programs, along with the examples from housing, tax credit, income supplementation, and parenting supports, exemplify ways in which children's healthy development is promoted by policies or programs that are not child focused, but rather address the social determinants of health and that by virtue of the assistance provided to families and communities have far broader effects, mobilizing a sense of purpose and engagement, thus strengthening the possibilities for children's healthy development.

Conclusion

Policy makers, researchers, and program officials concerned about healthy child development, future adult health and productivity, and societal prosperity should focus their attention on policies and programs that support the foundations of children's health. One way to do so is to pay particular attention to those initiatives that strengthen the contexts for children—their families and their communities. This includes looking closely at policies not typically involved in debates about children's health issues, such as housing, income supports, and employment benefits, as well as two-generation approaches. Policy makers may want to pursue design-oriented thinking to assess the value of new initiatives, not only in terms of costs and immediate benefits, but also in terms of potential effect on neighborhood and communities' sense of purpose—in other words, their collective efficacy. This should be considered a component of the Health in All Policies approaches [22,72].

Rebecca Solnit, in *Hope in the Dark* [73], says, "[W]e

write history with our feet and with our presence and our collective voice and vision." Although the pace of change—especially for initiatives that operate at larger system levels such as neighborhoods and communities—can be slow, it may be useful to recall that the past three decades of progress in health services occurred less as dramatic transformations and more as small, focused, and incremental steps toward a shared goal. Social progress is often invisible because it proceeds incrementally. National and state policies and programs that enhance community efforts to change *social environments*, rather than change *people*, are likely to have the longest-term positive effect on healthy child development with additional downstream improvements in adult health and communities. In a 2001 report, the National Academies of Science, Engineering, and Medicine recommend exactly this broader approach [74]. We urge a concerted focus on broad social policies targeting families and communities that can increase the capacity for collective efficacy and thus promote healthy child development. A concerted focus on broad social policies targeting families and communities should be strongly considered to increase the capacity for collective efficacy and thus promote healthy child development

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