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Progress toward a Prevention Perspective

Matthew W. Stagner and Jiffy Lansing

Summary

Matthew Stagner and Jiffy Lansing chart developments in the field of child maltreatment and propose a new framework for preventing child abuse and neglect. They begin by describing the concept of investment-prevention as it has been applied recently in fields such as health care and welfare. They then explain how the new framework applies to maltreatment prevention, noting in particular how it differs from the traditional child protective services response to maltreatment.

Whereas the traditional response aims to prevent a recurrence of maltreatment once it has already taken place, the new framework focuses on preventing maltreatment from occurring at all. Rather than identifying risk factors for maltreatment and addressing the problems and deficiencies of the primary caretaker, the new framework focuses on strengthening protective factors and building family and social networks to reinforce the ability of parents to care for their children. Whereas the orientation of the traditional child welfare service approach is legal and medical, the new framework has a more developmental and ecological orientation. It aims to build on the strengths children have at particular points of the life stage and enhance the social context of the child. Rather than putting families into the hands of unknown professionals who shuffle them from one program to another, including foster care, the investment-prevention model seeks to integrate professionals and paraprofessionals from the family's community into their everyday life, as well as to ensure an interconnected system of services. Finally, rather than seeking to minimize harm to the child, it aims to maximize potential—to strengthen the capacity of parents and communities to care for their children in ways that promote well-being.

Researchers have struggled to define maltreatment, identify its causes, and assess its consequences and costs. In recent years, however, researchers have clarified the severe consequences of child maltreatment and highlighted several risk factors. They have also developed new prevention interventions based on a variety of theories explaining why maltreatment takes place. Stagner and Lansing conclude with a brief survey of these new prevention interventions. The task for researchers now, they say, is to conduct rigorous evaluations of the interventions to demonstrate the benefits of prevention.

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Prevention can be conceptualized as investing in future outcomes by influencing current behavior or conditions. Expenditures made now, if they change conditions or behavior, may stave off future problems that cost more than the prevention efforts, even when future costs are discounted. The concept is common enough in everyday life: a regular oil change puts off costly engine troubles; regular dental check-ups help avoid expensive and painful dental surgery; wearing a seat belt limits the harm caused in the event of a crash. Investing time, energy, and money now may prevent future costly problems. The likelihood of cost savings at the individual or community levels can, when recognized by the individual or community itself, motivate preventive action. Not everyone, however, takes preventive action even when it appears to be in his or her best interest. Among the barriers to investing in prevention are inadequate resources, failure to grasp the benefits, failure to understand the causes, and indifference to the consequences.

Successfully implementing prevention requires identifying and defining clearly the social problem to be prevented. It also requires accurately calculating the costs of the social problem and comparing them with the costs of preventive action. Finally, it requires establishing a clear linkage between the causes of the social problem and the behavior or condition change that can prevent the later problem. This linkage provides a framework for the preventive intervention.

Prevention practices have been developed in fields from health care to crime control, drawing on a variety of theoretical and practical approaches. For example, one way to prevent disease (and to avoid the high costs of

medical treatment) is by distributing health information on the negative consequences of smoking and poor nutrition. Another is to promote health positively and proactively through interventions, such as nutritional assistance in the Women, Infants, and Children (WIC) program. Yet other ways include imposing legal consequences, as with mandatory seat belt laws, or making adjustments to the environment, such as installing cameras and increasing police presence in areas identified as “hot spots” for criminal activity. For such prevention policies to succeed, it is necessary to make accurate assumptions about the risk factors that influence behavior or conditions.

Preventing problems, rather than responding to them after they have occurred, appeals to Americans. Doing so is, however, sometimes ethically or socially complex. For example, the ethical implications of emergency contraception as a means to prevent pregnancy complicate the development and implementation of public policies. Sometimes policy efforts are complicated by social norms that seem to contradict the aims of prevention efforts. Teen birthrates, for example, are influenced by the norms of the context within which the individual functions. Research indicates that social factors such as not being in school three months post-partum and having many friends who are adolescent parents are factors in predicting a second birth among teenage mothers.¹ In many real-life situations, it can be difficult to generate appropriate normative standards to aid targeting prevention efforts to those who need it most.

Access to services alone is not sufficient to fulfill prevention goals: the services must be responsive to local norms and build support from within the community in order to reach those at risk. Such norms are particularly

difficult to generate from the top down in a society that is multicultural and constantly adapting to technological advances, new political attitudes, and changing economic conditions. A bottom-up approach, grounded in local contexts, may prove to be more effective.

In this article we set forth a framework for prevention of child maltreatment and explore how child maltreatment policy has developed in its support of prevention. We review research findings on the consequences of child maltreatment, the risk factors for maltreatment, and the theoretical perspectives that connect causes to possible interventions. We conclude by surveying some types of interventions that fit this developing framework on prevention. Child maltreatment prevention has recently moved away from individually focused responses to instances of abuse or neglect and toward a more community-focused system of shared responsibility for the well-being of children.² Prevention efforts increasingly aim to strengthen the capacity of parents and communities to care for their children in ways that promote well-being.³

In 2002, Tom Corbett and Rebecca Swartz championed an investment-prevention (IP) framework for welfare reform that transcends the established “silos” within which programs traditionally operate by connecting services and interventions through systems of collaboration that address long-term problems and prevent future ones.⁴ They suggested that such a model would decrease welfare dependence, increase employment, and decrease poverty. This IP approach can serve as a model framework for maltreatment prevention as well. The IP approach acknowledges the importance of identifying which services would benefit broad segments of the

population and which would best be targeted to specific groups. Rather than addressing individual deficits, the IP approach focuses on how aspects of the individual and his or her community can help improve functioning.

Social science researchers have recently made significant progress in understanding the complicated phenomenon of child maltreatment and in considering how American society can best respond to it. Increasingly, that response incorporates an investment-prevention approach. The articles in this volume lay out some of the best current thinking on the prevention of child maltreatment.

The Evolution of Child Maltreatment Prevention in the United States

Child maltreatment prevention has evolved in a complex policy environment over the past forty years. Despite decades of public efforts to combat abuse and neglect, child maltreatment remains a significant social problem in the United States. Finding the most effective ways to prevent maltreatment could reap significant benefits both for individuals and for society, but the best ways to identify and respond to those at risk of maltreatment remain elusive.

Modern perspectives on child maltreatment can be traced to the early 1960s, when advances in radiological technology enabled physicians to visualize and document abuse.⁵ In 1962, Dr. Henry Kempe published the first empirical work on the scope of “battered child syndrome,” describing for the first time the medical aspects of child abuse.⁶ Kempe’s study documented more than 300 cases of suspected maltreatment discovered in emergency rooms. It provided insight into the scope of the problem, served as a model for similar scientific surveys, and offered

“diagnostic clues” for physicians and other frontline responders. It also made an explicit public policy recommendation to develop an official reporting system to protect children who are suspected of being victims of abuse.

In response to Kempe’s call for action, states began to develop response systems and reporting laws. The laws required professionals working with children, such as doctors, teachers, and therapists, to report suspected cases of child maltreatment to a state agency.⁷ For states that adopted official reporting systems, Congress authorized grants to be used to protect children against abuse. By 1967, in what Barbara Nelson calls “one of the most rapidly adopted legislative trends in the twentieth century,” all states and the District of Columbia had passed some form of reporting laws.⁸ The medical field continues to have a strong influence over child maltreatment intervention, though state reporting and response systems now focus on social, rather than medical, services.

During the 1960s and 1970s, these newly developing social service channels motivated the public to begin reporting suspected abuse. David Gil’s 1965 public opinion poll revealed that although only 23 percent of respondents said that they would report families they suspected of being involved in child maltreatment to the police, 45 percent said they would report such suspicions to social service agencies.⁹ The increase in formalized channels for reporting helped to build the field of child maltreatment prevention as a scientific and applied endeavor. It also advanced the professionalization of practitioners working with children and families affected by maltreatment. The focus of these systems, however, was on responding to reports of maltreatment, rather than on prevention.

The federal Child Abuse and Neglect Prevention and Treatment Act (CAPTA) was signed into law in 1974. Though “prevention” was part of the title, the initial legislation was largely based on preventing the recurrence of child maltreatment through establishing reporting laws and child protective service systems. CAPTA’s initial guidelines encouraged states to establish specific agencies to track and investigate reports of maltreatment with the aim of protecting the children from future harm after a report was made.

Most interventions in the child maltreatment field are now geared toward families first known to authorities after maltreatment occurs. In 2006, charges of abuse or neglect were substantiated for an estimated 905,000 children.¹⁰ In nonfatal cases of substantiated abuse, nearly three-quarters of victims (74.7 percent) had no history of prior confirmed victimization, and about 10 percent were infants under the age of one year, meaning, for first children, there was little time to intervene.¹¹ One study found that approximately 19 percent of fatalities caused by child maltreatment occurred in infants under the age of one year. Almost a third of these infants—32.7 percent—were less than one week old.¹²

The CAPTA legislation, which has gone through many amendments, was most recently reauthorized as the Keeping Children and Families Safe Act of 2003. This latest incarnation highlights the growing interest in preventing maltreatment before it occurs by directly funding child maltreatment prevention. The law also funds assessment, investigation, prosecution, and treatment activities and supports research, evaluation, technical assistance, and data collection activities. It established the Office on Child Abuse and Neglect within the federal bureaucracy.

Child maltreatment policy efforts are complicated by social mores, such as continuing corporal punishment in some schools, violence in the media, or neighborhoods with entrenched poverty, and by public policies, such as those that lead to poor educational systems or limited access to health insurance.¹³ Over the past few decades, public consciousness about child maltreatment has been raised by professional recognition of the problem, scientific research on the causes and effects, increased media attention to incidents of abuse, and advocacy for policy developments. New policy developments include flexibility in eligibility requirements and federal funding to support community-based early interventions, family-strengthening efforts, early education programs, and child welfare system infrastructure enhancements.¹⁴

Challenges in Developing a Prevention Approach

Several barriers have slowed development of a prevention orientation in the field of child maltreatment. The first has been difficulties in defining the problem to be prevented. The second has been a failure to understand the full consequences and costs of child maltreatment. The third has been incomplete understanding of the causes of maltreatment and the ways in which intervention might interrupt those causes.

Definitions

A clear definition of child maltreatment continues to elude experts in the field. CAPTA sets forth a minimum definition of child abuse and neglect as any recent act or failure to act on the part of a parent or caretaker that results in death, serious physical or emotional harm, sexual abuse, or exploitation; or an act or failure to act on the part of a parent or caretaker that presents an imminent risk of serious harm.¹⁵ Although the

medical field is uniquely positioned to identify physical maltreatment of children after the fact, experts broadly agree that child maltreatment can involve harm that leaves no physical evidence.

Over the past few decades, public consciousness about child maltreatment has been raised by professional recognition of the problem, scientific research on the causes and effects, increased media attention to incidents of abuse, and advocacy for policy developments.

The definition of child maltreatment now includes physical, emotional, psychological, and sexual abuse, as well as “neglect.”¹⁶

Neglect is an imprecise term that can encompass caregivers’ neglect of physical needs such as food, clothing, and shelter, neglect of education, neglect of medical care, and emotional neglect. The term *neglect* is also susceptible to cultural interpretations of parenting practices in the United States.¹⁷ In some cultural enclaves, it is not considered neglectful for children to stay in the home unsupervised because of the proximity of extended family or close ties in the neighborhood. In others, some medical interventions are avoided because of religious beliefs. Depending on the context and legal standards of neglect, these culturally specific practices could be considered child neglect and children could be removed from the

home if other strategies are not employed to promote parental behavioral change. Because CAPTA's definitional framework sets only minimum standards, the details of a definition fall to state policy makers, with the result that definitions of, and legal consequences for, child maltreatment vary by state.¹⁸ For this reason, researchers must take into account the range of state definitions when aggregating and interpreting state data.

State definitions remain broad enough to require practitioners in the medical, social services, educational, and legal fields to make case-by-case clinical judgments, some of which can be individually biased or systematically flawed.¹⁹ Despite decades of federal and state legislation, these issues continue to challenge the field and heighten the importance of defining child maltreatment and its consequences.

Consequences

Both short- and long-term effects of maltreatment can be severe, for individual children as well as for society. The most serious consequence is the death of the child. In 2006, 1,530 children died as the result of abuse or neglect in the United States.²⁰ In addition, many early childhood deaths attributed to accidents or sudden infant death syndrome (SIDS) may be due to maltreatment.²¹ Despite imprecise reporting, child maltreatment is the leading cause of injury-related death for children less than one year of age.²²

A number of studies indicate that child maltreatment inhibits successful development. Some immediate consequences include physical injuries,²³ delayed physical growth,²⁴ neurological damage,²⁵ and cognitive and language deficits.²⁶ Moreover, these consequences are often interrelated. Penelope Trickett and Catherine McBride-Chang

found in a review of research that maltreatment had psychobiological consequences, perhaps as a stress reaction.²⁷ Maltreatment affects development and adjustment, as well as relationships with parents, other adults, and peers. Problems include aggression, withdrawal, and isolation.

Maltreatment can directly affect a child's brain. Danya Glaser found a stress response in the brain in maltreated children, as well as biochemical, functional, and structural changes that are not part of the stress response.²⁸ She concluded, "There is considerable evidence for changes in brain function in association with child abuse and neglect." These neurobiological findings explain some of the emotional, psychological, and behavioral difficulties facing maltreated children.

Many of the consequences of maltreatment continue into adulthood. Child maltreatment is associated with long-term psychological and emotional problems such as depression, self-injurious behavior, and increased risk of suicidal ideation;²⁹ increased risk of substance abuse, aggression, and criminal activity;³⁰ and post-traumatic stress disorder.³¹ Cathy Widom found that abused and neglected children had higher rates of adult criminality than a matched control group.³² Amy Silverman and several colleagues found that abused children were functioning more poorly at age twenty-one than were non-abused peers.³³ Robin Malinosky-Rummell and David Hansen reviewed seven areas of possible long-term consequences of childhood physical abuse and found that physically abused children demonstrate significantly elevated levels of nonviolent criminal behavior.³⁴ Relational problems associated with the effects of child maltreatment can cause further harm and significant costs to society.³⁵ The effects of maltreatment, in short, compromise lifetime productivity.³⁶

Causes

Policy makers need to understand the wide range of potential causes of child maltreatment before they can develop a clear framework or theory for intervening. One task is to understand risk factors associated with child maltreatment. Another is to consider a range of theories that can tie these risk factors together and provide insights for prevention.

Child maltreatment is associated with many risk factors. Some involve the child, some the parent, and some the context in which the family lives. For example, one clear risk factor is the child's age. Many studies indicate that the younger a child is, the higher the risk for severe or fatal maltreatment.³⁷ Since 1983, about one-fifth of all children who are admitted to foster care because of maltreatment are less than a year old.³⁸

Parent risk factors are heterogeneous and cannot be characterized by a single psychological orientation or social situation. Risk seems to be related to both internal factors (competencies and vulnerabilities that the parent brings to the situation) and external factors (stressful or socially isolating factors that would affect anyone in that situation).³⁹

Contextual risk factors that contribute to maltreatment risk include small, sparse social networks⁴⁰ and community disorganization and violence.⁴¹ Some data also suggest correlations between child maltreatment in the home and domestic violence, substance abuse, single parenting, and teen pregnancy.⁴² Among contextual risk factors, the relationship between poverty and maltreatment is particularly complex. Maltreatment is more commonly reported to child welfare agencies in poor and extremely poor families than in families with higher incomes.⁴³ It is unclear whether the discrepancy in rates of reporting

accurately reflects maltreatment incidents. The higher rate for families in poverty may be skewed by data collection methods,⁴⁴ disparity in services to populations in different geographical areas, and professional bias. One study found significant underreporting by hospitals of white and wealthy families of children alleged to be victims of abuse or neglect.⁴⁵ That finding suggests the need for caution in causally linking low socioeconomic status with higher rates of child maltreatment. Nonetheless, research does suggest a direct link between social stressors, especially perceived economic stress, and higher rates of child abuse.⁴⁶

Building a Theoretical Basis for Prevention

The many risk factors for and causes of child maltreatment complicate efforts to conceptualize effective policy mechanisms for prevention. In one such effort, the Children's Bureau outlined five protective factors that may diminish the likelihood of maltreatment: nurturing and attachment between family members; knowledge of parenting and child development; parental emotional resilience; social connections for parents; and concrete supports such as food, clothing, housing, transportation, and services.⁴⁷ Although the prevention field now recognizes the interdependence of multiple causes of child maltreatment, many interventions focus on addressing one particular risk factor. The result is a wide range of disconnected and under-funded prevention activities.⁴⁸

The five protective factors associated with maltreatment can be interpreted in numerous ways to build a theory for prevention. Deborah Daro has identified four common theoretical perspectives on prevention. The first, psychodynamic theory, posits that if parents better understand and accept their

role as parents, they will be less abusive. The second, learning theory, is that if parents better understand how to care for their children, they will be less abusive. The third, environmental theory, is that if parents have access to more and better resources, they will be less likely to abuse. The fourth, ecological theory, is that child abuse will decline if a network of community support can compensate for individual, situational, and environmental shortcomings.⁴⁹

The theoretical orientation of prevention is often linked to questions about targeting—that is, determining which families should be the focus of the intervention. The interventions themselves may focus on characteristics as different as poverty, family dysfunction, or individual behaviors. But for targeting to have a chance to work, researchers must develop effective programs that address the appropriate causes for the appropriate population segments.

Increasingly, research has deepened analysts' understanding of the multiple and overlapping risk factors that contribute to social problems such as crime, family violence, and substance abuse.⁵⁰ Because child maltreatment is subject to so many risk and protective factors simultaneously, analysts must determine whether increasing parental knowledge, changing parental attitudes and behaviors, or influencing the contexts in which families function will be the most effective strategy in particular situations. It is also important to consider the delivery of the program (the style, substance, and location) to understand which strategies are appropriate for particular populations and contexts.

Robert Gordon, in the area of disease prevention, and later Karol Kumpfer and Gladys Baxley, in the area of substance use, proposed

a three-tiered classification system for preventive intervention: universal, selective, and indicated.⁵¹ The child maltreatment prevention field has translated these tiers as follows. Universal prevention efforts attempt to influence the attitudes and behaviors of the population at large to achieve primary prevention. Targeted (selective) efforts aim specific programs at particularly defined “at-risk” populations to achieve secondary prevention. And indicated efforts are designed to prevent further maltreatment where abuse has already been reported. Universal and targeted approaches are considered to be “before-the-fact” prevention efforts, while indicated interventions are “after-the-fact” approaches.

Each tier of this framework has different goals and requires different approaches.⁵² Universal and targeted prevention approaches aim to stem maltreatment before it starts by minimizing identified risk factors for maltreatment and maximizing protective factors. Numerous prevention approaches can be applied both universally and to targeted groups. As Neil Guterman notes, enrollment strategies in prevention programs rarely represent purely universal or targeted approaches.⁵³ Many interventions that can be implemented universally, such as those that distribute educational materials and operate family support groups, can also be implemented with populations assessed to be at-risk. And, in fact, considerations such as funding sources and service availability often outweigh strategic intention in decisions about whether interventions will be offered universally or targeted to particular groups. The U.S. historical and political context also influences intervention funding and targeting questions. Strong views about both the privacy of the family and the right of parents to raise their children as they see fit, as well as value judgments about whether families

“deserve” to receive public support, continue to shape the structure and content of intervention policy.⁵⁴

Indicated interventions, the third tier of child maltreatment prevention, were the first to be federally mandated and institutionalized. Such interventions, which serve families where maltreatment has already occurred, begin with monitoring by professionals who have contact with children, such as teachers and school administrators, doctors, therapists, and even bus drivers. Sometimes, child welfare agency intervention takes the form of removing the child from the family of origin and placing him or her in foster care. At other times, child welfare intervention involves referral to services in the community. It is worth noting that placement decisions affect families of color and impoverished families at disproportionate rates.⁵⁵

Trade-offs and Challenges in Targeting

Proponents of targeting to specific subpopulations argue that public funds should be spent where they are most needed and can achieve the best results. Successful targeting thus requires accurate benefit-cost analysis. Which interventions, targeted on which families, are most likely to avoid the severe consequences of maltreatment? Researchers have yet to develop fully the rigorous intervention evaluations needed to inform such analysis. This volume outlines the progress made in making informed targeting decisions.

Demographic-based targeting strategies have been more successful than others, in part because they serve more or less as universal interventions for specific subpopulations, such as first-time parents or families of low socioeconomic status.⁵⁶ As such, they lessen the likelihood of stigmatization and more

easily facilitate peer networks. They also lessen the need to enforce eligibility criteria or provide alternatives to those who may benefit from some form of assistance but are not eligible for the particular program.

Because child maltreatment is subject to so many risk and protective factors simultaneously, analysts must determine whether increasing parental knowledge, changing parental attitudes and behaviors, or influencing the contexts in which families function will be the most effective strategy in particular situations.

Demographic factors can be used to identify geographic areas where interventions can be targeted—for example, neighborhoods with inadequate social or human services capacity or areas that offer institutional structures on which to build, such as hospitals or community colleges. Demographic factors also may identify natural access points within an under-served community, such as a church, beauty shop, or shopping mall, which can be used to build existing informal networks into broader systems of support.

Unlike targeted interventions, universal prevention approaches educate the general public about the consequences of child maltreatment and provide information about and

access to resources. One mass media universal approach uses everyday language and compelling images in television, radio, print, and billboard public service messages. First implemented during the 1970s, that approach continues to be considered a vital component of comprehensive maltreatment strategies.⁵⁷ Yet Deborah Daro and Karen McCurdy find little evidence that it has positive effects on either maltreatment or related outcomes such as parental attitudes, knowledge, and behaviors, parent-child interactions, and child outcomes.⁵⁸

Ascertaining whether programs are well-targeted is challenging as well. Targeting at levels other than universal sometimes requires assessing which families may be at risk. Researchers have developed tools to help identify parents and caregivers who are likely to maltreat again, but results suggest further refinement is needed to improve the accuracy of such assessment instruments.

Risk assessment tools are often highly inaccurate.⁵⁹ Reviews of formalized risk-assessment methods call into serious question the use of such professionally administered checklists in child protection decision-making.⁶⁰ One review of risk assessment instruments used by child protective services indicates that 13 percent to 25 percent of the families identified as likely to abuse their children again do not in fact repeat the abuse and that 14 percent to 86 percent identified as unlikely to abuse again later do repeat the abuse.⁶¹

Evaluations of programs that employ screening measures that include families with a low risk of maltreatment can show inflated rates of success. On the other hand, evaluations of programs accurately targeted to families with greater risk of maltreatment may show lower rates of overall success (though potentially

greater benefit). This highlights the role of screening and assessment in targeting interventions. Because of the complexity of assessing child maltreatment prevention programs, recent efforts in program development, implementation, and evaluation have focused on determining “best practices” rather than on evaluating the impact of program models themselves.⁶²

Benefits of Successful Prevention Efforts

Although researchers have documented with increasing clarity the consequences of maltreatment and have gained a better understanding of the costs of interventions and how to target, they have been less successful in identifying rigorously the benefits of various prevention interventions. Results from meta-analyses that use statistical techniques to summarize the outcomes of child maltreatment interventions are mixed.⁶³

Measuring the costs and benefits of child maltreatment programs is complex. Reporting inconsistencies and discrepancies plague some seemingly simple-to-determine costs, such as death and treated injury. These outcomes, for example, are often attributed to other causes.⁶⁴ Despite evidence linking maltreatment with longer-term, negative behavioral outcomes, it is impossible to pinpoint maltreatment as the sole or primary contributor to psychosocial problems, delinquency, educational difficulties, criminality, or engaging in risky behavior.

Some studies, however, do present findings on the cost of maltreatment. Ching-Tung Wang and John Holton, using direct and indirect costs, estimate the nationwide annual costs of child abuse and neglect at \$103.8 billion in 2007 dollars.⁶⁵ And Robert Caldwell performed a state-level comparative analysis

of the costs associated with child maltreatment and the costs of providing child maltreatment prevention services to all first-time parents.⁶⁶ Including costs associated with low-birth-weight babies, infant mortality, special education, protective services, foster care, juvenile and adult criminality, and psychological services, Caldwell estimated the cost to Michigan of child maltreatment at \$823 million annually. Such costs suggest that successful prevention programs could reap significant savings.

Some prevention programs show positive results. The most promising appear to be those that focus on early intervention—identifying risk factors as early as possible in order to provide services that lessen the impact of those factors on a child's development. These risk factors can include infant or child health or disability but can also include risk factors for maltreatment. Key assumptions of early intervention include the cognitive advantage hypothesis (increasing children's cognitive skills early supports individual development) and the family support hypothesis (participation enhances parenting practices, attitudes and expectations, and involvement in children's education). The function of early intervention is to identify and serve special needs early in life in order to increase the developmental and educational gains of the child and improve the functioning of the family, thereby reaping societal and cost-saving benefits in the long term.⁶⁷ An evaluation of the Healthy Families Alaska Program, for example, found that it reduced parental stress and improved child development.⁶⁸ The benefits possible from maltreatment prevention programs may be comparable to those of early childhood education, a specialized focus of early intervention with an increasing flow of federal funds. Participating in early childhood education, for example,

has been shown to improve educational performance, raise earnings, and decrease criminal behaviors later in life.⁶⁹ And the return for investing in high-quality early childhood programs and services can be substantial. Based on the gains cited above, James Heckman has calculated a cost-benefit ratio of approximately \$7 for every \$1 invested in high-quality early childhood experiences for at-risk children.⁷⁰

Possible Approaches to Preventing Child Maltreatment

In the following section we briefly describe various types of interventions and the risk and protective factors they aim to influence. We provide a quick overview to suggest the range of approaches and the trade-offs within each. We also align the interventions with Daro's four theoretical perspectives outlined above. In the remainder of the volume, contributors examine these and other interventions in greater detail.

Education (Learning Theory)

Distributing educational materials to a family when a baby is born is one effective way to teach new parents about healthy parent-child interaction and child care practices. In a randomized trial using culturally sensitive videotapes that illustrated both successful and unsuccessful strategies for feeding infants, parental attitudes and parent-child interactions during feedings significantly improved among first-time African American teen mothers in the intervention compared with those in the control group.⁷¹

Support Groups (Learning, Environmental, and Ecological Theories) Support groups provide formal peer support facilitated by a trained professional. They also encourage participants to create their own informal support networks. Most support

group models seek to enhance protective factors such as improved parent-child interaction and communication as well as to reduce negative behaviors.⁷² When support groups are offered through public education systems, early education programs such as Head Start, or child care centers, they often include opportunities for parent-child interactions and early childhood education interventions aimed at children.⁷³

Daro and McCurdy's analysis of parent education and support groups shows promising positive effects on parental attitudes, knowledge, and behaviors.⁷⁴ And Abt Associates' national evaluation of family support services found that group-based parenting education and support produced larger positive effects on children's cognitive and socio-emotional development than did home-visiting services.⁷⁵

Home Visitation (Learning, Environmental, and Ecological Theories)

A promising means of delivering targeted services to individual families is home visitation. Because very young children can suffer from especially high rates of maltreatment, the most promising programs appear to be those that focus on early intervention. Having a trained professional or paraprofessional deliver services in the home rather than in a professional office or community center makes it possible to tailor services to each family's needs. Home visitors can also assess environmental factors that influence the family's child-rearing practices. Because such services can initially be provided to all families identified by demographic or geographic risk factors, they also function as an assessment for further services. Studies evaluating home-visiting programs show some positive results, but at the same time they make clear that a program's services

must be appropriately configured and delivered to be effective.⁷⁶

Community Programs and Broad Public Policies (Environmental and Ecological Theories)

Community-based programs address socioeconomic risk factors by providing access to services and financial support. By linking parents to local support networks (both formal and informal), they also address risk factors associated with social isolation and community context. Families facing limited access to child care or reliable transportation are often unable to sustain involvement in structured groups.⁷⁷ Strategic placement of programs within the local community may increase the likelihood of participation, facilitate support networks, and provide information. Such programs can include voluntary home-visiting programs, parent support groups, and family support center programs.

The field stands ready to experiment more broadly and to learn more about the possibilities of a range of approaches to preventing maltreatment.

Public policies that provide maternity and paternity leave, as well as child care subsidies, can also be seen as community-level supports. Paid maternity leave promotes parent-child attachment in the crucial early months of life and alleviates the financial stress of loss of income. Free or subsidized child care promotes work by easing the burden of child care costs. Both maternity

and paternity leave and child care policies can promote child and family well-being, enhance the quality of family and community life, and promote self-sufficiency. Moreover, such policies enhance the business community's perception of the value of child rearing and its commitment to promoting healthy families.

Individual or Family Therapy (Psychodynamic Theory)

Most often provided after maltreatment has occurred, these therapeutic approaches are sometimes part of the service plan requirements for children returning from substitute care to their parents. Psychotherapy presumes that maltreatment occurs because of the parent's maladaptation to earlier-in-life experiences and is the result of unconscious unresolved conflict being acted out in the family context. The psychodynamic therapist helps the client acknowledge the existence and consequences of the maladaptation, while working with the client to develop strategies for change, including competencies associated with identifying, establishing, and maintaining supportive social networks.⁷⁸ Family therapy provides a professionally guided exploration of family roles and dynamics that aims to improve family and individual functioning.⁷⁹

Psychiatrists often use play therapy to help young children express and understand past events in order to increase the likelihood of resilience and decrease the likelihood of their developing maladaptive coping techniques.⁸⁰ There is very little systematic evaluation of these types of interventions, which are as yet provided only to families already in the child welfare system. The individualized and long-term nature of this treatment makes it

a costly intervention, even if successful at preventing future maltreatment. Perhaps the greatest potential benefit is for society. By fostering resilience and adaptability in victims of maltreatment, successful psychodynamic therapy could preclude their future involvement in the child welfare system as parents.

Conclusion

Child maltreatment prevention has evolved greatly since the "discovery" of child abuse by the medical profession and the American public about a half century ago. It has been difficult for the child maltreatment field to focus on primary prevention given the vast increase in reports of child abuse and neglect in the intervening years and given the legal mandate to investigate and respond to all of these reports. But the consequences of maltreatment are now well documented, and the trade-offs of various types of targeting are better known. The field stands ready to experiment more broadly and to learn more about the possibilities of a range of approaches to preventing maltreatment. These approaches increasingly appear to reflect the investment-prevention paradigm. They are focused on recognizing and strengthening protective factors, building social networks, maintaining awareness of family and community contexts, integrating professionals and natural helpers into the everyday lives of families, intensifying system approaches by stepping outside of traditional service silos and partnerships, and exploring new ways of integrating services and aspects of the child welfare system. In systematically testing such approaches, the field of child maltreatment prevention will have a greater impact on families by reducing the severe consequences of child maltreatment.

Endnotes

1. Leslie Raneri and Constance Wiemann, "Social Ecological Predictors of Repeat Adolescent Pregnancy," *Perspectives on Sexual and Reproductive Health* 39, no. 1 (March 2007): 39–47.
2. Deborah Daro and Karen McCurdy, "Interventions to Prevent Maltreatment," in *The Handbook of Injury and Violence Prevention*, edited by Lynda Doll and others (New York: Springer, 2007), pp. 137–55.
3. Deborah Daro and Ann Donnelly, "Child Abuse Prevention: Accomplishments and Challenges," *The AP-SAC Handbook on Child Maltreatment*, 2nd ed., edited by John Myers and others (Thousand Oaks, Calif.: Sage Publications, 2002).
4. Tom Corbett and Rebecca Swartz, *Thinking about the Next Generation: A Prevention Perspective* (A White Paper commissioned by the Wisconsin Department of Workforce Development, 2002).
5. Barbara Nelson, *Making an Issue of Child Abuse* (University of Chicago Press, 1984).
6. Henry Kempe and others, "The Battered Child Syndrome," *Journal of the American Medical Association* 181 (1962): 17–24.
7. David Kerns and others, "The Role of Physicians in Reporting and Evaluating Child Sexual Abuse Cases," *Future of Children* 4, no. 2 (1994): 119–34.
8. Nelson, *Making an Issue of Child Abuse* (see note 5).
9. David Gil, *Violence against Children: Physical Child Abuse in the United States* (Harvard University Press, 1970).
10. U.S. Department of Health and Human Services, *Child Maltreatment 2006* (Washington: U.S. Government Printing Office, 2008).
11. Ibid.
12. Centers for Disease Control, "Variation in Homicide during Infancy: United States, 1989–1998," *MMWR* 2, no. 51 (2002): 187–89.
13. James Garbarino, "The Role of Economic Deprivation in the Social Context of Child Maltreatment," in *The Battered Child*, 5th ed., edited by Mary E. Helfer, Ruth Kempe, and Richard Krugman (University of Chicago Press, 1997), pp. 49–60; Murray Straus, *Beating the Devil out of Them: Corporal Punishment in American Families* (Lexington, Ky.: Lexington Books, 1994).
14. National Child Abuse Coalition, "Child Abuse and Neglect: Prevention and Treatment Policy Recommendations," report to the Transition Office of the President, November 2008.
15. Child Welfare Information Gateway, *Long-Term Consequences of Child Abuse and Neglect* (Washington: Children's Bureau/ACYF, 2006).
16. Because sexual abuse is handled differently at the policy, legal, and social service practice levels (through education and direct intervention with children and aggressive prosecution of offenders), we exclude it from our definition of child maltreatment for the purposes of the following discussion.
17. Jill Korbin and James Spilsbury, "Cultural Competence and Child Neglect," *Neglected Children: Research, Practice, and Policy*, edited by Howard Dubowitz (Thousand Oaks: Sage Publications, 1999), pp. 69–88.

18. Stanford Katz and others, "Legal Research on Child Abuse and Neglect: Past and Future," *Family Law Quarterly* 11, no. 2 (1977): 151–84.
19. See, for example, Sonja Olsen and Maureen Durkin, "Validity of Hospital Discharge Data Regarding Intentionality of Pediatric Injuries," *Epidemiology* 7, no. 6 (1996): 644–47.
20. U.S. Department of Health and Human Services, *Child Maltreatment 2006* (see note 10).
21. Bernard Ewigman, Coleen Kivlahan, and Garland Land, "The Missouri Child Fatality Study: Underreporting of Maltreatment Fatalities among Children Younger than Five Years of Age, 1983 through 1986," *Pediatrics* 91, no. 2 (1993): 330–37.
22. Anna E. Waller, Susan P. Baker, and Andrew Szocka, "Childhood Injury Deaths: National Analysis and Geographic Variations," *American Journal of Public Health* 79 (1989): 310–15.
23. Christine Bonnier, Marie-Cécile Nassogne, and Philippe Evrard, "Outcome and Prognosis of Whiplash Shaken Infant Syndrome: Late Consequences after a Symptom-Free Interval," *Developmental Medicine & Child Neurology* 37, no. 11 (1995): 943–56; John A. Lancon, Duane E. Haines, and Andrew D. Parent, "Anatomy of the Shaken Baby Syndrome," *Anatomical Record* 253, no. 1 (1998): 13–18.
24. Dennis Drotar, "Prevention of Neglect and Non-Organic Failure to Thrive," *Prevention of Child Maltreatment: Developmental and Ecological Perspectives*, edited by Diane J. Willis, E. Wayne Holden, and Mindy Rosenberg (New York: John Wiley, 1992), pp. 115–49; John Money, "The Syndrome of Abuse Dwarfism (Psychosocial Dwarfism or Reversible Hyposomatropism)," *American Journal of Diseases of Children* 131, no. 5 (1977): 508–13.
25. Bonnier, Nassogne, and Evrard. "Outcome and Prognosis of Whiplash Shaken Infant Syndrome" (see note 23); Lucinda Dykes, "The Whiplash Shaken Infant Syndrome: What Has Been Learned?" *Child Abuse and Neglect* 10 (1986): 211–21; Dorothy O. Lewis, "From Abuse to Violence: Psychological Consequences of Maltreatment," *Journal of the American Academy of Child and Adolescent Psychiatry* 31, no. 3 (1992): 383–91; Bruce Perry and others, "Childhood Trauma, the Neurobiology of Adaptation, and Use-Dependent Development of the Brain: How States Become Traits," *Infant Mental Health Journal* 16, no. 4 (1995): 271–91; Bruce D. Perry and Ronnie A. Pollard, "Altered Brain Development Following Global Neglect in Childhood," paper presented at the Society for Neuroscience Annual Meeting, New Orleans, 1997.
26. Rhianon E. Allen and Gail Wasserman, "Origins of Language Delay in Abused Infants," *Child Abuse and Neglect* 9 (1985): 335–40; David Kolko, "Characteristics of Child Victims of Physical Violence: Research Findings and Clinical Implications," *Journal of Interpersonal Violence* 7, no. 2 (1992): 244–76.
27. Penelope K. Trickett and Catherine McBride-Chang, "The Developmental Impact of Different Forms of Child Abuse and Neglect," *Developmental Review* 15 (1995): 311–37.
28. Danya Glaser, "Child Abuse and Neglect and the Brain—A Review," *Journal of Child Psychology and Psychiatry* 41 (2000): 97–116.
29. Amy Silverman and others, "The Long-Term Sequelae of Child and Adolescent Abuse: A Longitudinal Community Study," *Child Abuse and Neglect* 20, no. 8 (1996): 709–23; Denise M. Allen and Kenneth J. Tarnowski, "Depressive Characteristics of Physically Abused Children," *Journal of Abnormal Child Psychology* 17 (1989): 1–11.

30. Cathy Spatz Widom and Helene R. White, "Problem Behaviours in Abused and Neglected Children Grown Up: Prevalence and Co-Occurrence of Substance Abuse, Crime, and Violence," *Criminal Behaviour & Mental Health* 7, no. 4 (1997): 287–310.
31. Roscoe Dykman and others, "Internalizing and Externalizing Characteristics of Sexually and/or Physically Abused Children," *Integrative Physiological & Behavioral Science* 32, no. 1 (1997): 62–74.
32. Cathy Spatz Widom, "Child Abuse, Neglect, and Violent Criminal Behavior," *Criminology* 27 (1989): 251–71.
33. Silverman and others, "The Long-Term Sequelae of Child and Adolescent Abuse" (see note 29).
34. R. Malinosky-Rummell and D. Hansen, "Long-Term Consequences of Childhood Physical Abuse," *Psychological Bulletin* 114, no. 1 (1993): 68–79.
35. Child Welfare Information Gateway, *Long-Term Consequences of Child Abuse and Neglect* (see note 15); Jill Goldman and others, *A Coordinated Response to Child Abuse and Neglect: The Foundation for Practice, Child Abuse and Neglect User Manual Series* (Washington: Government Printing Office, 2003); Dana Hagele, "The Impact of Maltreatment on the Developing Child," *North Carolina Medical Journal* 66 (2005): 356–59; Dorothy O. Lewis, Catherine Mallouh, and Victoria Webb, "Child Abuse, Delinquency, and Violent Criminality," in *Child Maltreatment: Theory and Research on the Causes and Consequences of Child Abuse and Neglect*, edited by Dante Cicchetti and Vicki Carlson (Cambridge University Press, 1989), pp. 707–21; Joan McCord, "A Forty-Year Perspective on the Effects of Child Abuse and Neglect," *Child Abuse and Neglect* 7 (1983).
36. Deborah Daro, *Confronting Child Abuse* (New York: Free Press, 1998).
37. U.S. Department of Health and Human Services, *Child Maltreatment 2006* (see note 10); Anna E. Waller, Susan P. Baker, and Andrew Szocka, "Childhood Injury Deaths: National Analysis and Geographic Variations," *American Journal of Public Health* 79 (1989): 310–15; Ching-Tung Wang and Kathryn Harding, *Current Trends in Child Abuse Reporting and Fatalities: The Results of the 1998 Annual Fifty State Survey* (Chicago: National Center on Child Abuse Prevention Research, 1999).
38. Fred H. Wulczyn, Allen Harden, and Robert Goerge, *An Update from the Multistate Foster Care Data Archive: Foster Care Dynamics, 1983–1994* (Chicago: Chapin Hall Center for Children at the University of Chicago, 1997); Fred H. Wulczyn, Lijun Chen, and Kristen B. Hislop, *Foster Care Dynamics: A Report from the Multistate Foster Care Data Archive* (Chicago: Chapin Hall Center for Children at the University of Chicago, 2007).
39. Karen Kugler and Robert Hansson, "Relational Competence and Social Support among Parents at Risk of Child Abuse," *Family Relations* 37 (1988): 328–32; Ray E. Helfer and C. Henry Kempe, eds. *Child Abuse and Neglect: The Family and the Community* (Cambridge, Mass.: Ballinger, 1976); Murray A. Straus, Richard Gelles, and Suzanne Steinmetz, *Behind Closed Doors: Violence in the American Family* (New York: Anchor Press, 1980); JoAnn Robinson, "Are There Implications for Prevention Research from Resilience Studies?" *Child Development* 71, no. 3 (2000): 570–72; Larry Dumka and others, "Using Research and Theory to Develop Prevention Programs for High Risk Families," *Family Relations* 44, no. 1 (1995): 78–86.
40. Sara J. Corse, Kathleen Schmid, and Penelope K. Trickett, "Social Network Characteristics of Mothers in Abusing and Non-Abusing Families and Their Relationship to Parenting Beliefs," *Journal of Community*

- Psychology* 18, no. 1 (1990): 44–59; Patricia M. Crittendon, “Social Networks, Quality of Child Rearing, and Child Development,” *Child Development* 56 (1985): 1299–1313; Madeline L. Lovell and J. David Hawkins, “An Evaluation of a Group Intervention to Increase the Social Networks of Abusive Mothers,” *Children and Youth Services Review* 10 (1988): 175–88.
41. Claudia Coulton and others, “Community-Level Factors and Child Maltreatment Rates,” *Child Development* 66 (1995): 1262–76; Jill Korbin, “Sociocultural Factors in Child Maltreatment,” in *Protecting Children from Abuse and Neglect: Foundations for a New National Strategy*, edited by Gary B. Melton and Frank D. Barry (New York: Aldine de Gruyter, 1994), pp. 182–223; Roy Ososky and others, “Chronic Community Violence: What Is Happening to Our Children?” *Psychiatry* 51 (1993): 236–41; John E. Richters and Pedro Martinez, “The NIMH Community Violence Project: I. Children as Victims and Witnesses to Violence,” *Psychiatry* 56 (1993): 7–21.
 42. Maureen Black and others, “Parenting and Early Development among Children of Drug-Abusing Women: Effects of Home Intervention,” *Pediatrics* 94, no. 4 (1994): 440–48; Mary M. McKay, “The Link between Domestic Violence and Child Abuse: Assessment and Treatment Considerations,” *Child Welfare* 73, no. 1 (1994): 29–39; Center on Child Abuse Prevention Research, *Intensive Home Visitation: A Randomized Trial, Follow-up, and Risk Assessment Study of Hawaii’s Healthy Start Program* (Chicago: National Committee to Prevent Child Abuse, 1996); Ching-Tung Wang and John Holton, *Total Estimated Cost of Child Abuse and Neglect in the United States: Economic Impact Study* (Chicago: Prevent Child Abuse America, funded by the Pew Charitable Trusts, 2007).
 43. National Research Council, *Understanding Child Abuse and Neglect* (Washington: National Academy Press, 1993) (www.nap.edu/books/0309048893/html [accessed August 2008]).
 44. In the national statistical system that tracks child maltreatment, children are counted as victims if an investigation by the state child welfare agency classifies their case as either “substantiated” or “indicated” child maltreatment. Substantiated cases are those in which an allegation of maltreatment or risk of maltreatment was supported or founded according to state law or policy. Indicated cases are those in which an allegation of maltreatment or risk of maltreatment could not be substantiated, but there was reason to suspect maltreatment or the risk of maltreatment.
 45. Robert L. Hampton and Eli H. Newberger, “Child Abuse Incidence and Reporting by Hospitals: Significance of Severity, Class, and Race,” *American Journal of Public Health* 75 (1985): 60–65.
 46. Christina Paxson and Jane Waldfogel, “Work, Welfare, and Child Maltreatment,” *Journal of Labor Economics* 20, no. 3 (2002): 435–74; Jennifer Peterson and Dale Hawley, “Effects of Stressors on Parenting Attitudes and Family Functioning in a Primary Prevention Program,” *Family Relations* 47, no. 3 (1998): 221–27.
 47. Child Welfare Information Gateway, *Preventing Child Abuse and Neglect Factsheet* (Washington: Children’s Bureau/ACYF 2008).
 48. Daro, *Confronting Child Abuse* (see note 36); Deborah Daro, “Child Abuse Prevention: New Directions and Challenges,” *Journal on Motivation* 46 (2000): 161–220.
 49. Deborah Daro. “Child Maltreatment Research: Implications for Program Design,” in *Child Abuse, Child Development, and Social Policy*, edited by Dante Cicchetti and Sheree Toth (New York: Ablex Publishing, 1993), pp. 331–67.

50. Alexandra Okun, Jeffery G. Parker, and Alytia A. Levendosky, "Distinctive and Interactive Contributions of Physical Abuse, Socioeconomic Disadvantage, and Negative Life Events to Children's Social, Cognitive, and Affective Adjustment," *Development and Psychopathology* 6 (1994): 77–98.
51. Robert Gordon, "An Operational Classification of Disease Prevention," in *Preventing Mental Disorders*, edited by Jane A. Steinberg and Morton M. Silverman (Rockville, Md.: U.S. Department of Health and Human Services, 1987); Karol L. Kumpfer and Gladys B. Baxley, *Drug Abuse Prevention: What Works?* (Rockville: National Institute on Drug Abuse, 1997).
52. Because particular prevention approaches will be comprehensively presented in other articles in this volume, we do not attempt to do so here.
53. Neil B. Guterman, *Stopping Child Maltreatment before It Starts: Emerging Horizons in Early Home Visitation Services* (Thousand Oaks, Calif.: Sage Publications, 2001).
54. Ibid.
55. Mark Courtney and others, "Race and Child Welfare Services: Past Research and Future Directions," *Child Welfare* 75, no. 2 (1996): 99–137.
56. Guterman, *Stopping Child Maltreatment before It Starts* (see note 53).
57. Ann Cohn Donnelly, "An Overview of Prevention of Physical Abuse and Neglect," in *The Battered Child*, 5th edition, edited by Mary E. Helfer, Ruth Kempe, and Richard Krugman (Chicago: University of Chicago Press, 1997), pp. 579–93.
58. Daro and McCurdy, "Interventions to Prevent Maltreatment" (see note 2).
59. Kevin Browne and Sarah Saqi, "Approaches to Screening for Child Abuse and Neglect," in *Early Prediction and Prevention of Child Abuse*, edited by Kevin Browne and Cliff Davies (U.K.: John Wiley, 1988), pp. 57–85; Robert Caldwell and others, "The Assessment of Child Abuse Potential and the Prevention of Child Abuse and Neglect: A Policy Analysis," *American Journal of Community Psychology* 16, no. 5 (1988): 609–24; Jon Korfmacher, "The Kempe Family Stress Inventory: A Review," *Child Abuse and Neglect* 24, no. 1 (2000): 129–40; John M. Leventhal, "Can Child Maltreatment Be Predicted during the Prenatal Period: Evidence from Longitudinal Cohort Studies," *Journal of Reproductive and Infant Psychology* 6, no. 3 (1988): 139–61; Peter Lyons and others, "Risk Assessment for Child Protective Services: A Review of the Empirical Literature on Instrument Performance," *Social Work Research* 20, no. 3 (1996): 143–55; Karen McCurdy, "Risk Assessment in Child Abuse Prevention Programs," *Social Work Research* 19, no. 2 (1995): 77–87.
60. Caldwell and others, "The Assessment of Child Abuse Potential" (see note 59).
61. Lyons and others, "Risk Assessment for Child Protective Services: A Review of the Empirical Literature on Instrument Performance" (see note 59).
62. Guterman, *Stopping Child Maltreatment before It Starts* (see note 53); David Thomas and others, *Emerging Practices in the Prevention of Child Abuse and Neglect* (Sponsored by the Office on Child Abuse and Neglect, Children's Bureau, 2003); Arizona Department of Health Services, Division of Behavioral Health, *Research-Based Elements of Effective Prevention Strategies* (Phoenix: Arizona Department of Health Services, 2002).

63. Daro and McCurdy, "Interventions to Prevent Maltreatment" (see note 2).
64. Philip W. McClain and others, "Estimates of Fatal Child Abuse and Neglect, United States, 1979 through 1988," *Pediatrics* 91 (1993): 338–43; Bernard Ewigman, Coleen Kivlahan, and Garland Land, "The Missouri Child Fatality Study: Underreporting of Maltreatment Fatalities among Children Younger than Five Years of Age, 1983 through 1986," *Pediatrics* 91, no. 2 (1993): 330–37; Roy Meadow, "Unnatural Sudden Infant Death," *Archives of Disease in Childhood* 80 (1999): 7–14.
65. Wang and Holton, *Total Estimated Cost of Child Abuse and Neglect in the United States* (see note 42).
66. Robert A. Caldwell, *The Costs of Child Abuse vs. Child Abuse Prevention: Michigan's Experience* (Michigan Children's Trust Fund and Michigan State University, 1992).
67. Neil B. Guterman, "Early Prevention of Physical Child Abuse and Neglect: Existing Evidence and Future Directions," *Child Maltreatment* 2, no. 1 (1997): 12–34; David Olds and Harriet Kitzman, "Review of Research on Home Visiting for Pregnant Women and Parents of Young Children," *Future of Children* 3, no. 3 (1993): 53–92.
68. Johns Hopkins University, *Evaluation of the Healthy Families Alaska Program: Final Report* (Alaska Mental Health Trust Authority and the Alaska State Department of Health and Social Services, 2005).
69. Jean Burr and Rob Grunewald, *Lessons Learned: A Review of Early Childhood Development Studies* (Minneapolis: Federal Reserve Bank of Minneapolis, 2006) (www.minneapolisfed.org/Research/studies/earlychild/lessonslearned.pdf [accessed September 2006]).
70. James J. Heckman, *Policies to Foster Human Capital*, JCPR Working Paper 154 (Northwestern University and University of Chicago Joint Center for Poverty Research, 2000).
71. Maureen Black and Laureen Teti, "Promoting Meal-Time Communication between Adolescent Mothers and Their Infants through Videotape," *Pediatrics* 99 (1997): 6–15.
72. Carl Dunst, *Key Characteristics and Features of Community-Based Family Support Program* (Chicago: The Family Resource Coalition, 1995).
73. Daro and McCurdy, "Interventions to Prevent Maltreatment" (see note 2).
74. Ibid.
75. Jean Layzer and Barbara Goodson, *National Evaluation of Family Support Programs*, prepared for the Department of Health and Human Services, ACYF (Cambridge: Abt Associates, 2001).
76. Deanna S. Gomby, Patti L. Culross, and Richard E. Behrman, "Home Visiting: Recent Program Evaluations—Analysis and Recommendations," *Future of Children* 9, no. 1 (1999): 4–26; Guterman, "Early Prevention of Physical Child Abuse and Neglect" (see note 67); Guterman, *Stopping Child Maltreatment before It Starts* (see note 53).
77. Daro, "Child Maltreatment Research" (see note 49).
78. Karen E. Kugler and Robert O. Hansson, "Relational Competence and Social Support among Parents at Risk of Child Abuse," *Family Relations* 37, no. 3 (July 1988): 328–42.
79. Sandra L. Halperin, "Abused and Non-Abused Children's Perceptions of Their Mothers, Fathers, and Siblings: Implications for a Comprehensive Family Treatment Plan," *Family Relations* 30, no. 1 (January

- 1981): 89–96; William J. Doherty, “Boundaries between Parent and Family Education and Family Therapy: The Levels of Family Involvement Model,” *Family Relations* 44, no. 4, Helping Contemporary Families (October 1995): 353–58.
80. Naida D. Hyde, “Play Therapy: The Troubled Child’s Self-Encounter,” *American Journal of Nursing* 71, no. 7 (July 1971): 1366–70.