Safety and Stability for Foster Children: A Developmental Perspective

Brenda Jones Harden

SUMMARY

Children in foster care face a challenging journey through childhood. In addition to the troubling family circumstances that bring them into state care, they face additional difficulties within the child welfare system that may further compromise their healthy development. This article discusses the importance of safety and stability to healthy child development and reviews the research on the risks associated with maltreatment and the foster care experience. It finds:

- Family stability is best viewed as a process of caregiving practices that, when present, can greatly facilitate healthy child development.
- Children in foster care, as a result of exposure to risk factors such as poverty, maltreatment, and the foster care experience, face multiple threats to their healthy development, including poor physical health, attachment disorders, compromised brain functioning, inadequate social skills, and mental health difficulties.
- Providing stable and nurturing families can bolster the resilience of children in care and ameliorate negative impacts on their developmental outcomes.

The author concludes that developmentally-sensitive child welfare policies and practices designed to promote the well-being of the whole child, such as ongoing screening and assessment and coordinated systems of care, are needed to facilitate the healthy development of children in foster care.

Brenda Jones Harden, Ph.D., is an associate professor at the Institute for Child Study in the Department of Human Development at the University of Maryland, College Park.

Protecting and nurturing the young is a universal goal across human cultures. An abundance of research from multiple fields confirms the importance of the family unit as the provider of safe, stable, and nurturing environments for children. Unquestionably, children who are reared in safe and stable environments have better short- and long-term adjustment than children who are exposed to harmful experiences. Moreover, research demonstrates that children exposed to violent, dangerous, and/or highly unstable environments are more likely to experience developmental difficulties.[1] Children exposed to violence within their homes experience the most deleterious outcomes. For example, children exposed to physical maltreatment often experience impairments in their physical health, cognitive development, academic achievement, interpersonal relationships, and mental health.[2] Erratic, insecure home environments and a lack of continuity and constancy in caregiving are also associated with poor developmental outcomes.

Children in foster care are particularly vulnerable to detrimental outcomes, as they often come into state care due to their exposure to maltreatment, family instability, and a number of other risk factors that compromise their healthy development. Foster children may be witnesses to and victims of family violence, or may not have been supervised or provided for in an appropriate manner. They may have been subjected to the inadequate and impaired caregiving that results from a variety of parental difficulties, such as substance abuse, mental illness, and developmental disabilities. Moreover, these children are predominantly from impoverished backgrounds, a situation that exacerbates the risk factors they experience.

This article examines the research on the importance of safety and stability in the lives of children and in the lives of foster children in particular. Importantly, family stability is defined not as a specific family structure or condition, but rather as a family environment in which caregiving practices provide children with the consistent, nurturing care they need to thrive. The article also discusses the factors in the family and child welfare systems that influence foster children's development. It concludes with recommendations for developing more developmentally-sensitive child welfare policies and practices.

Family Stability and Healthy Child Development

Child development can be understood as the physical, cognitive, social, and emotional maturation of human beings from conception to adulthood, a process that is influenced by interacting biological and environmental processes. Of the environmental influences, the family arguably has the most profound impact on child development.

Family stability has been defined in many ways in the empirical literature. Traditionally, many researchers defined family stability in terms of factors related to family structure (for example, single parenthood).[3] Specifically addressing the experiences of foster children, other scholars have defined stability as limited movement from home to home.[4] However, exploring the various family processes that pertain to stability may be a more useful means of understanding the specific characteristics of family stability that support healthy child development. For example, parental mental health, stable relationships among caregivers, and positive parenting are cited as markers of family stability.[5] Characteristics of the home environment, such as warmth, emotional availability, stimulation, family cohesion, and day-to-day activities, have also been implicated in the notion of family stability.[6] Children who experience family stability have caregivers who remain constant, consistent, and connected to them over time; caregivers who are mentally healthy and engage in appropriate parenting practices; a cohesive, supportive, and flexible family system; and a nurturing and stimulating home environment. This definition of family stability is not offered as a standard by which to evaluate families in the child welfare system, but rather as an essential goal of child welfare intervention with biological, foster, and adoptive families.

Children are more likely to have trusting relationships with caregivers who are consistent and nurturing, which leads to a number of positive developmental outcomes.[7] (See Box 1.) Moreover, the research suggests that positive and consistent caregiving has the potential to compensate for factors that have a deleterious impact on children, such as poverty and its associated risk factors.[8] In other words, children have much better outcomes if their family lives are stable,

Box 1

Family Stability Enhances Developmental Outcomes

Research has found that family stability can have positive effects on a child's health behaviors and outcomes, academic performance and achievement, social skills development, and emotional functioning.

- **Health:**
  Children who have consistent and positive relationships with their parents are more likely to have positive health behaviors and lower levels of illness.[a] With regard to accessing health services, stable families are also more likely to obtain well-child care and the appropriate immunizations for their children.[b]

- **Academic:**
  Children with stable relationships with consistent caregivers perform better academically and on achievement tasks and are less likely to repeat a grade or drop out of school.[c]

- **Social/Emotional:**
  Children reared in stable environments are more likely to have positive relationships with peers and more prosocial skills. They are also less likely to have behavioral problems and to be diagnosed with mental illness.[d]

[a] Tinsley, B., and Lees, N. Health promotion for parents. In *Handbook of parenting.* Vol. 4, *Applied and practical parenting.* M. Bornstein, ed. Mahwah, NJ: Lawrence Erlbaum Associates, 1995, pp. 187–204; and Gottman, J., and Katz, L. Effects of marital discord on young children's peer interaction and health. *Developmental Psychology* (1989) 25:373–81.

[b] Hickson, G., and Clayton, E. Parents and their children's doctors. In *Handbook of Parenting.* Vol. 4. *Applied and practical parenting.* M. Bornstein, ed. Mahwah, NJ: Lawrence Erlbaum Associates, 1995, pp. 163–85.

[c] Epstein, J. Effects on student achievement of teachers' practices of parent involvement. In *Advances in reading/language research: Vol. 5. Literacy through family, community and school interaction.* S. Silvern, ed. Greenwich, CT: JAI, 1991, pp. 261–76; and Fehrmann, P., Keith, T., and Reimers, T. Home influences on school learning: Direct and indirect effects of parent involvement on high school grades. *Journal of Educational Research* (1987) 80:330–37.

[d] Ladd, G., and Pettit, G. Parenting and the development of children's peer relationships. In *Handbook of parenting.* Vol. 5, *Practical issues in parenting.* 2nd ed. M. Bornstein, ed. Mahwah, NJ: Lawrence Erlbaum Associates, 2002, pp. 377–409; and Campbell, S. Behavior problems in preschool children: A review of recent research. *Journal of Child Psychology and Psychiatry and Allied Disciplines* (1995) 36(1):113–49.

despite the overwhelming influence of poverty and associated risk factors. Research has also documented that stability in the family unit promotes positive outcomes for children within particular developmental periods (see Box 2).

Conversely, child maltreatment reflects an extreme form of family instability. Data from the National Survey of Child and Adolescent Well-Being (NSCAW), the only large-scale, nationally representative study of foster children, as well as data from other studies, indicate that the majority of children enter the foster care system due to neglect.[9] The next largest group enters the system due to physical abuse, and a smaller number enter due to sexual abuse.[10] Moreover, almost half of children who are maltreated experience more than one type of maltreatment. Thus, many scholars recommend examining the consequences of maltreatment in general, rather than specific types of maltreatment. Nevertheless, a large body of research documents that these forms of maltreatment are associated with adverse outcomes in physical health, brain development, cognitive and language skills, and social-emotional functioning.[11] For example, neglect is associated with a variety of developmental difficulties in childhood, including cognitive, language, and academic delays, poor peer relations, and internalizing (anxiety, depression) and externalizing (aggression, impulsivity) behavioral problems.[12] Physical abuse, in addition to its physical health consequences, has been linked to cognitive delays, aggressive behavior, peer difficulties, posttraumatic stress disorder, and other externalizing and internalizing behavioral problems.[13] Documented consequences of sexual abuse include low academic performance, depression, dissociation, inappropriate sexual behavior, and other high-risk behaviors in later childhood.[14] Emotional maltreatment, which is implicated in all other forms of maltreatment, leads to declines in cognitive and academic functioning, as well as a variety of behavioral problems.[15] The diagnosis of "failure to thrive" is a particularly illuminating health outcome of a problematic family environment. The experience of severe parental emotional unavailability leads to serious growth delays as well as psychological difficulties in young children.[16]

Specific areas of child development research are particularly relevant to a consideration of the impact of family instability on foster children, and on child welfare policy and practice in general. Although the following paragraphs are by no means exhaustive, the research on attachment, brain development, and resilience seems particularly germane to an understanding of the development of foster children.

Attachment

The capacity of maltreated children to attach to caregivers has been a key concern and has been widely studied among child welfare experts. Attachment can be defined as the enduring emotional bond that exists between a child and a primary caregiver, who could be a biological parent or an unrelated caregiver. Most children are securely attached to their caregivers: They look to their caregivers for comfort when distressed and are able to explore their environment because of the security they feel in their relationships with their caregivers. Alternatively, due to the uncertainty they feel in their relationships with their caregivers, insecurely attached children may not be adequately consoled by their caregivers or able to explore their environments. Children reared by caregivers who are inconsistent or demonstrate inadequate parenting practices are much more likely to be insecurely attached, or to have a disordered attachment.[17]

Attachment disorders, which lead to the most problematic outcomes for children, include those in which children have disrupted attachments to their caregivers, display overly vigilant or overly compliant behaviors, show indiscriminate connection to every adult, or do not demonstrate attachment behaviors to any adult. Children with insecure, "disordered" or "disorganized" attachments may also have many other adverse outcomes that persist throughout childhood, such as poor peer relationships, behavioral problems, or other mental health difficulties.[18]

Maltreated children are often exposed to inconsistent and inadequate parenting and, as a result, may experience difficulty in forming healthy attachments. Some studies suggest that upwards of three-quarters of maltreated children have disordered attachments, but that the proportion may diminish with age.[19] The limited empirical work on attachment in foster children suggests that they are more likely than nonfoster children to have insecure and disorganized attachments. How-

Box 2

Family Stability and Developmental Milestones

Infants and Toddlers

Infancy is a time of extraordinary growth across developmental domains. Children reared in stable environments are more likely to successfully accomplish the two social-emotional milestones of this period: attachment to a primary caregiver and the emergence of an autonomous self (that is, the child explores his or her own goals independently from a caregiver). The development of language and emotional expression are also supported through positive relationships with stable caregivers. These early milestones set the foundation for positive development throughout childhood.

Preschool

During the preschool period, major developmental milestones include self-regulation and the emergence of morality, both of which are strongly linked to the internalization of adult standards and behaviors.[a] Preschool-age children whose parents provide them with consistent modeling and guidance about how to express and modulate their emotions demonstrate enhanced self-regulation, which is generally defined as the capacity to adapt emotions to a level that allows the individual to achieve a desired goal.[b] Additionally, children who learn about fairness, justice, acceptable behavior, and interpersonal problem solving from caring adults demonstrate more advanced social and moral development.[c]

Middle Childhood

Functioning well in the formal school environment, interacting appropriately with peers, and regulating one's own behavior are the major developmental goals of the middle childhood years. Research has documented that consistent and positive caregiving is related to academic achievement, relationships with teachers, and engagement in the school.[d] Similarly, positive peer relationships during middle childhood, including friendships and prosocial behavior (for example, positive social behavior without expectation of reward), are related to school-age children's experiences of positive parenting.[e] Consistent, nurturing parenting is also implicated in children's capacity to comply with rules and behave appropriately in the absence of an adult.[f]

Adolescence

Adolescents are occupied with forging an identity, separating from their family systems, and planning for the future. Research suggests that these developmental tasks are best accomplished when children have had solid relationships with caregivers who have balanced the adolescents' need for separation with their need to rely on their caregivers for concrete and emotional support.[g] Another strand of research indicates that risky behaviors prevalent during adolescence are less likely among adolescents who have long-term, nurturing, minimally conflictual relationships with their caregivers.[h]

[a] Turiel, E. The development of morality. In *Handbook of child psychology.* Vol. 3, *Social, emotional and personality development.* W. Damon, ed. New York: Wiley & Son, 1997, pp. 863–932.

[b] Cassidy, J. Emotion regulation: Influences of attachment relationships. *Monographs of the Society for Child Development* (1994) 59(2–3):228–83; Denham, S. *Emotional development in young children.* New York: Guilford, 1998.

[c] Kochanska, G. Children's temperament, mothers' discipline and security of attachment: Multiple pathways to emerging internalization. Child Development (1995) 66:597–615.

[d] Conners, L., and Epstein, J. Parent and school partnerships. In *Handbook of parenting.* Vol. 4, *Applied and practical parenting.* M. Bornstein, ed. Mahwah, NJ: Lawrence Erlbaum Associates, 1995, pp. 437–58.

[e] Cassidy, J., Kirsh, S., and Scolton, K. Attachment and representations of peer relationships. *Developmental Psychology* (1996) 32(5):892–904; and Ladd, G., and Pettit, G. Parenting and the development of children's peer relationships. In *Handbook of parenting.* Vol. 5, *Practical issues in parenting.* 2nd ed. M. Bornstein, ed. Mahwah, NJ: Lawrence Erlbaum, 2002, pp. 377–409.

[f] See note c, Kochanska.

[g] Eccles, J., Early, D., Frasier, K., et al. The relation of connection, regulation and support for autonomy to adolescents' functioning. *Journal of Adolescent Research* (1997) 12(2):263–86.

[h] Forehand, R., Miller, K., Dutra, R., and Chance, M. Role of parenting in adolescent deviant behavior: Replications across and within two ethnic groups. *Journal of Consulting and Clinical Psychology* (1997) 65(6):1036–41.

ever, the psychological and environmental characteristics of their foster families can influence the type of attachments they have to their caregivers. In addition, research on the impact of institutionalization (that is, placement in orphanages or large-group foster care settings) on children suggests that children with multiple caregivers are more likely to display insecure attachments and indiscriminate friendliness.[20]

Brain Development

With the advent of less-invasive and less-expensive techniques for examining brain structure and function, contemporary developmental researchers have begun to investigate developmental processes at the level of the brain. A major conclusion derived from this research is that although children's experiences during the first three years of life are critical to brain development, the brain remains plastic even after infancy.

Although the existing research suggests diverse outcomes, scholars have documented that young children exposed to trauma (for example, maltreatment and other forms of violence) are more likely than children who have not been exposed to trauma to experience physiologic changes at the neurotransmitter and hormonal levels (and perhaps even at the level of brain structure) that render them susceptible to heightened arousal and an incapacity to adapt emotions to an appropriate level.[21] This emotional state increases their sensitivity to subsequent experiences of trauma and impairs their capacity to focus, remember, learn, and engage in self-control.[22]

In addition, the research on institutionalized children indicates that institutionalization and other adverse early experiences (for example, having multiple caregivers and being held and stimulated less) may affect brain structure and activity.[23] Findings from these studies suggest that the timing and duration of institutionalization are important. Better outcomes were noted in children who were adopted from institutions prior to their second birthdays.[24]

One study directly assessed the brain functioning of children in foster care using the popular method of examining levels of cortisol, the hormone produced in response to stress in humans.[25,26] Children who are exposed to high levels of stress show unusual patterns of cortisol production.[27] Foster children exhibited unusually decreased or elevated levels of cortisol compared to children reared by their biological parents.[28] Such findings are consistent with the literature, which points to the importance of the parent-child relationship in buffering the stress responses of children.

Resilience

The work on resilience is particularly relevant for foster children because it examines the factors that allow some children faced with severe adversities to "overcome the odds" and become successful at a variety of developmental and life-adjustment tasks.[29] Several characteristics of children and their environments may compensate for the high-risk situations with which they must contend, leading to more positive outcomes. These protective factors include child IQ, temperament, and health, as well as a warm parental relationship, engagement with school, and support outside the family (such as a mentor). Although the research on resilience in foster children specifically is sorely lacking, studies of maltreated children suggest that maltreated children who exhibit resilience have high cognitive competence, self-esteem, and ego control (including flexibility, planfulness, persistence, and reflection).[30] Thus, foster children, who have an increased likelihood of experiencing multiple risk factors such as poverty, maltreatment, and separation from family of origin, may have more positive outcomes if they are fortunate enough to also experience protective factors.

In summary, children in stable family environments are likely to experience positive, engaged parenting and to have positive developmental outcomes. By contrast, children in foster care have often experienced family instability and other types of maltreatment that compromise their healthy development. However, providing safe, stable, and nurturing homes for these children may lessen the harmful effects of their experiences by exposing them to protective factors that can promote resilience.

Developmental Outcomes of Children in Foster Care

Overall, the existing research suggests that children in foster care have more compromised developmental outcomes than children who do not experience place-

Foster care placement and the foster care experience more generally are associated with poorer developmental outcomes for children.

ment in foster care.[31] However, there is considerable variability in the functioning of foster children, and it is difficult to disentangle the multiple preplacement influences on foster children from those that result from the foster care experience itself. Children in foster care are biologically vulnerable to many poor developmental outcomes, due to genetic factors, prenatal substance exposure, and other physical health issues. Many of these children experienced trauma prior to foster care entry, which has been documented to have a major impact on children's outcomes across developmental domains.

Additionally, many scholars argue that the risk factor leading to negative outcomes is not foster care per se but the maltreatment that children experience beforehand. For example, in the NSCAW study, foster children with experiences of severe maltreatment exhibited more compromised outcomes.[32] Other scholars suggest that foster care may even be a protective factor against the negative consequences of maltreatment.[33] Similarly, it has been suggested that foster care results in more positive outcomes for children than does reunification with biological families.[34] Further, some studies suggest that the psychosocial vulnerability of the child and family is more predictive of outcome than any other factor.[35] Despite these caveats, the evidence suggests that foster care placement and the foster care experience more generally are associated with poorer developmental outcomes for children.

The Foster Care Experience and Developmental Outcomes

Many studies have pointed to the deleterious impact of foster care on children's physical health, cognitive and academic functioning, and social-emotional well-being. In the area of physical health, pediatric and public health scholars have documented that foster children have a higher level of morbidity throughout childhood than do children not involved in the foster care system. First, foster children are more likely to have perinatal experiences that compromise their physical health and overall development. For example, there has been a dramatic increase in the number of children entering foster care due to prenatal substance exposure.[36] The negative effects of substance exposure on the fetus and developing child have been extensively documented, although scholars emphasize the variability in outcomes as well as the contribution of multiple ecological factors to outcome.[37]

Foster children are also more likely to have growth abnormalities and untreated health problems.[38] Despite the trend in these data, some scholars have suggested that the negative health outcomes attributed to foster children are not distinct from those found among children living with their impoverished biological families. Although scholars have highlighted the fragmented system of health care for foster children, they also acknowledge an increased sensitivity to foster children's medical issues on the part of health care providers.[39]

In the area of cognitive and academic functioning, NSCAW documented that the majority of foster children scored in the normal range on cognitive and academic measures, although a higher proportion than would be expected in the general population were found to have delayed cognitive development and compromised academic functioning. For example, findings from NSCAW indicate that more than one-third of infants and toddlers in the One-Year Foster Care Sample and one-half in the Child Protection Sample scored in the delayed range on a developmental screener. In both samples, 7% of school-age children scored in the clinical range on a cognitive test, and 13% scored in the delayed range on a language test.[40] These data corroborate findings from smaller studies that point to developmental and cognitive delays in this population of children.[41] However, foster children scored in the same ranges as similarly high-risk children who were not in out-of-home placement (for example, children in poverty).

Regarding academic achievement, some studies have found that foster children perform more poorly on academic achievement tests, have poorer grades, and have higher rates of grade retention and special education placement.[42] The poorer academic functioning of foster children may not be attributable to their foster care

experiences per se but to their *pre*–foster care experiences such as poverty and maltreatment. Additionally, lower school attendance of foster children due to placement instability may be a contributor to their poor school functioning.

On social-emotional measures, foster children in the NSCAW study tended to have more compromised functioning than would be expected from a high-risk sample.[43] Moreover, as indicated in the previous section, research suggests that foster children are more likely than nonfoster care children to have insecure or disordered attachments, and the adverse long-term outcomes associated with such attachments.[44] Many studies of foster children postulate that a majority have mental health difficulties.[45] They have higher rates of depression, poorer social skills, lower adaptive functioning, and more externalizing behavioral problems, such as aggression and impulsivity.[46] Additionally, research has documented high levels of mental health service utilization among foster children[47] due to both greater mental health needs and greater access to services. Some scholars suggest that the poor mental health outcomes found in foster children are due to a variety of factors beyond their foster care experiences. These children may be biologically predisposed to mental illness and may have experienced traumas that have set them on a path of mental health difficulty.[48]

Placement Characteristics and Developmental Outcomes

The type of placement and the stability of that placement influence child outcomes. Research has shown that the majority of foster children are placed in foster families. A rapidly growing trend is the kinship placement of children. For example, in the NSCAW study, 58% of children who had been in foster care for one year were placed in nonrelative foster care, and 32% were placed in kinship care. The existing research on the effects of kinship care on child developmental outcomes are mixed. Some studies have documented that children in kinship care tend to have higher functioning than those in unrelated foster homes, but this may be a function of their being better off prior to placement with kinship care providers.[49] Another study, however, found that adults who had longer durations of kinship care as children had poorer outcomes than those who were in unrelated foster care.[50]

A much smaller proportion of children in the NSCAW study (9%) were placed in group homes or residential care. Such placements are more often used for adolescents and children with serious mental or physical health difficulties.[51] Overall, the evidence suggests that group home placement is deleterious to children.[52] Children in group care in the NSCAW study had poorer developmental outcomes than their counterparts in family environments, but they also had more intense needs at placement entry.[53] In a study comparing young children reared in foster family homes to those in group homes, children in group care exhibited more compromised mental development and adaptive skills but similar levels of behavioral problems.[54]

The research also suggests that placement instability is associated with negative developmental outcomes for foster children. Changes in placement or disruption rates are related to the length of the child's foster care stay,[55] the age of the foster child, and the functioning of the foster child (for example, mental health).[56] The quality of the parent-child relationship and the caseworker-foster parent relationship also influences placement stability. Most foster children experience only one to two placements. However, report data indicate that one-third to two-thirds of foster care placements are disrupted within the first two years.[57]

The type of placement also contributes to placement stability.[58] Children in kinship care tend to experience more stability (that is, fewer placement disruptions),[59] although high disruption rates are found in kinship situations with vulnerable children and/or families.[60] Placement stability for children in group care varies depending on child age and needs. For example, adolescents in group care typically have more stable placements than younger children. In contrast, very young children in group care experience a higher number of moves due to attempts to secure less-restrictive placements for them.[61]

It is difficult to disentangle whether placement stability predicts developmental outcomes or if children with developmental difficulties are more likely to experience multiple placements. For example, one study suggests that children's developmental delays may lead to multiple placements and also may be a consequence of multiple placements.[62] Further, most studies examin-

ing the effects of placement instability are not methodologically rigorous. Nevertheless, many studies suggest that placement instability leads to negative outcomes for children. Children in the NSCAW study with multiple placements had more compromised outcomes across domains than children who experienced greater placement stability.[63] In another study of a large group of foster children, the number of placements children experienced predicted behavioral problems 17 months after placement entry.[64] Other studies have reported that placement instability is linked to child behavioral and emotional problems, such as aggression, coping difficulties, poor home adjustment, and low self-concept.[65] Relatedly, children's perceptions of the impermanency of their placements have also been linked to behavioral difficulties.[66]

A Developmental-Ecological Approach

This brief review of the developmental literature suggests that the development of children in foster care can be enhanced with more stable environments in which to grow. "Ecological theory," as advanced by renowned developmental psychologist Urie Bronfenbrenner, emphasizes the multiple, interdependent "ecologies," or environmental systems, in which children develop.[67] In this theory, which has been tested and confirmed by numerous studies, the most important ecologies for children are the "microsystems"—those ecologies that contain the direct relationships children have with caring adults. To ensure that children in foster care experience greater stability and optimal developmental outcomes, it is incumbent upon the child welfare system to provide them with supportive microsystems. In other words, it is essential that the child welfare system provide foster children with protective and nurturing caregiving from substitute families when their biological parents cannot provide the safety and stability they need.

Creating Healthy Family Environments for Children in Care

The research presented above argues compellingly for continuity, constancy, and nurturance in the caregiving environments of children in foster care. Children reared in a high-quality caregiving ecology are set on a positive developmental path that has the potential to produce long-term positive outcomes.[68] Already vulnerable from the experiences of maltreatment and other environmental risk factors (for example, poverty and its associated stressors), the development of foster children is further compromised if they experience more trauma and instability while in care. Thus, sub-

stitute families best meet their needs if they are able to nurture and commit to these children over the long term. Unfortunately, research on foster care suggests that a significant proportion of foster families have parenting difficulties,[69] which may hinder their capacity to provide stable experiences for foster children. Although the experience is not commonplace, foster children are also maltreated by their foster parents.[70] The association between problematic parenting behaviors and the social-emotional maladjustment of foster children has been documented in several studies.[71]

An understanding of general child development and the child's individual developmental needs is crucial to understanding the type of caregiving foster children need. For example, the recognition that children in foster care often have achievement difficulties could promote the provision of more stimulating home environments. Some studies have examined the quality of the home environments of foster families, particularly their provision of stimulation and emotional responsiveness. One study found considerable variability in the quality of the home environments; higher-quality environments were found with families who had increased economic resources.[72] Another study also found variability in the home environments foster children experience and reported that unrelated foster parents had higher-quality home environments than kinship foster parents.[73] In this same vein, foster children need caregivers who can work with child welfare agencies to ensure that children's individual needs are met by the child welfare system and other social institutions charged with meeting these needs. Research has shown that foster parents who view themselves as part of an agency team with a goal of meeting the needs of children have more successful placements.[74]

Foster families also need to empathize with children's needs and experiences, such as early exposure to trauma and other risk factors. Empathy with maltreated children can play a major role in their social-emotional outcomes.[75] Foster parents must acknowledge and respect the multiple family ties foster children have. Children often feel connected to former foster parents and biological parents, which may bear on their ability to connect to current caregivers. Kinship foster parents have been documented to be more accepting of these other attachment relationships and, as a result, report better relationships than nonrelated foster parents with the children in their care.[76] Finally, an awareness and acceptance of one's racial or ethnic heritage is essential for developing a healthy sense of identity. Foster families must be sensitive to the need for children of different racial and ethnic backgrounds in their care to explore and celebrate their cultural heritage and traditions (see Box 3).

Creating Developmentally-Sensitive Child Welfare Agencies

Although ecological theory places primacy on the child's relationship with the caregiver, the larger ecologies that children indirectly experience contribute significantly to their outcomes. For foster children, the child welfare system is probably the ecology beyond the family with the greatest impact on their outcomes. The literature presented in this article presents a compelling argument for a twofold strategy to promote positive developmental outcomes in foster children: policy and practice to promote family stability; and policy and practice to specifically meet the developmental needs of children.

Despite the intuitive sensibility of such a twofold strategy, incorporating it into the child welfare service sector has many inherent challenges. First, the child welfare system has historically been concerned with shaping the experiences of children, not their functioning. Thus, the system focuses on outcomes relevant to safety and permanency, not to developmental outcomes. Services are established accordingly and are generally not designed to specifically promote the well-being of children. For example, the notion of prevention in child welfare refers to averting child placement within the foster care system, whereas prevention from a developmental perspective may have a goal of optimizing child functioning. These conceptual and service tensions reflect the vastly different perspectives of the child development and child welfare fields. An integration of the tenets of both fields is necessary to ensure that the needs of foster children are adequately addressed.

Child Welfare Policies

Shortening the time children spend in foster care by encouraging permanent placement has been the primary thrust of policies designed to ensure family sta-

Box 3

Racial/Ethnic Identity Development

Due to the disproportionate representation of minority children in foster care[a] and the practices that occur because of that overrepresentation (for example, transracial placement), the development of racial and ethnic identity for children in care is an important consideration for the field of child welfare. Racial/ethnic identity has been defined as a complex set of thoughts, feelings, and behaviors that emanate from one's membership in a particular racial or ethnic group.[b] Scholars suggest that racial and ethnic identity formation is an important developmental task for children from preschool through adolescence.

The developmental literature documents that the preschool period marks the beginning of children's understanding of racial and ethnic differences. A particularly controversial set of studies conducted over the last half century has examined racial identity and self-esteem among preschool children.[c] These studies suggest that minority preschool children have internalized societal perceptions of the lower status of their own and other racial minority groups, yet the children maintain feelings of high self-esteem. Other research underscores the importance of parental racial socialization in promoting positive racial identity in preschool children[d] and its relationship to favorable child outcomes.[e]

In middle childhood, children tend to grapple with racial and ethnic distinctions through questions about ethnic/racial groups, particularly their own reference group. During this period, they also begin to show a preference for their own ethnic/racial group,[f] which is primarily attributed to their cognitive advancement. Other evidence indicates that racial discrimination and a lack of community ethnic identification negatively impact developmental outcomes for minority school-age children.[g]

The preponderance of research on racial/ethnic identity development has been conducted with adolescents because identity formation is seen as a significant developmental task for this group of children. Adolescents demonstrate their burgeoning racial/ethnic identity through same-race friendships and overt references to racial and ethnic pride.[h] Those with a strong sense of ethnic identity display positive perceptions of and connections to their ethnic groups. Some research suggests that ethnic identity is a "protective" factor for these adolescents, which may positively influence their psychological well-being.[i]

At each stage of development, racial and ethnic identity formation plays a critical role in helping a child develop a healthy sense of self and collective belonging. Children of color in foster care are often placed in homes with families of different racial and/or ethnic backgrounds, thus they face unique challenges in the process of identity formation. (See the article by Stukes Chipungu and Bent-Goodley in this journal issue for further discussion of the developmental challenges of children of color in foster care.)

[a] Courtney, M., Barth, R., Berrick, J., et al. Race and child welfare services: Past research and future directions. *Child Welfare* (1996) 75:99–137; and Barth, R. The effects of age and race on the odds of adoption versus remaining in long-term out-of-home care. *Child Welfare* (1997) 76:285–308.

[b] Helms, J. The conceptualization of racial identity and other "racial" constructs. In *Human diversity: Perspectives on people in context*. E. Trickett, ed. San Francisco, CA: Jossey-Bass, 1994, pp. 285–311; and Rotheram, M., and Phinney, J. Introduction: Definitions and perspectives in the study of children's ethnic socialization. In *Children's ethnic socialization: Pluralism and development*. Vol. 81, Sage focus editions series. J. Phinney and M. Rotheram, eds. Newbury Park, CA: Sage Publications, 1987, pp. 10–31.

[c] Clark, K., and Clark, M. Skin color as a factor in racial identification of Negro preschool children. *Journal of Social Psychology* (1940) 11:156–69; and Spencer, M., and Markstrom-Adams, C. Identity processes among racial and ethnic minority children in America. *Child Development* (1990) 61(2):290–310.

[d] Caughy, M., O'Campo, P., Randolph, S., and Nickerson, K. The influence of racial socialization practices on the cognitive and behavioral competence of African-American preschoolers. *Child Development* (2002) 73(5):1611–25.

[e] Branch, C., and Newcombe, N. Racial attitude development among young Black children as a function of parental attitudes: A longitudinal and cross-sectional study. *Child Development* (1986) 57:712–21.

[f] Murray, C., and Mandara, J. Racial identity development in African American children: Cognitive and experiential antecedents. In *Black children: Social, educational, and parental environments*. 2nd ed. H. McAdoo, ed. Thousand Oaks, CA: Sage Publications, 2002, pp. 73–96.

[g] Johnson, D. Parental characteristics, racial stress, and racial socialization processes as predictors of racial coping in middle childhood. In Forging links: *African American children—clinical developmental perspectives*. A. Neal-Barnett, J. Contreras, and K. Kerns, eds. Westport, CT: Praeger, 2001, pp. 57–74.

[h] Phinney, J., and Tarver, S. Ethnic identity search and commitment in Black and White eight graders. Journal of Early Adolescence (1988) 8(3):265–77.

[i] Phinney, J. Ethnic identity in adolescents and adults: Review and integration. *Psychological Bulletin* (1990) 108:499–514; and Phinny, J., and Rosenthal, D. Ethnic identity in adolescence: Process, context, and outcome. In *Adolescent identity formation*. Vol. 4, *Advances in adolescent development* series. G. Adams, T. Gullotta, and R. Montemayor, eds. Newberry Park, CA: Sage Publications, 1992, pp. 145–72.

bility for children in foster care. The Adoption and Safe Families Act (ASFA) and the Adoptions Assistance and Child Welfare Act (AACWA) have resulted in lower rates of foster care entry and shorter stays in foster care (see the article by Allen and Bissell in this journal issue for a more detailed discussion of these policies). Practices such as expedited permanency hearings and concurrent planning (that is, simultaneously working toward a child's return home and placement in another permanent home) have also increased the numbers of foster children who experience permanency. Permanency has also been achieved by increasing the numbers of children who are placed in adoptive homes, a trend that began in the years following AACWA and continued with the passage of ASFA. Specialized recruitment efforts, more frequent termination of parental rights, and incentives for adoptive parents have served to increase the number of adoptive homes for children. (See the article by Testa in this journal issue.)

Although the aforementioned legislation and policy emphasize the goal of family reunification as much as that of adoption, the number of children who are returned to their biological parents has not risen appreciably.[77] Policy advocates assert that the lack of funding for intensive reunification efforts has been a major hindrance to this work. Others suggest that the permanency time limits imposed by ASFA are unrealistic when applied to families whose children are in the foster care system, given their chronic and complex needs. (See the articles by Stukes Chipungu and Bent-Goodley, and by Wulczyn in this journal issue.)

An increasing number of children are being returned to their extended family systems, either in guardianship or foster care status. Some jurisdictions are even making headway convincing relatives to adopt these children. (See the article by Testa in this journal issue.) The literature on these placements suggests that although kinship families are much more vulnerable than unrelated foster families, children living with relatives are more likely to remain in the same placement and to have longer durations in foster care.[78] Given the large numbers of kinship placements occurring across the United States, it would behoove the child welfare system to provide supportive services to these vulnerable kinship families to enable them to provide quality care to the children in their care (see the article by Geen in this journal issue). All these policies should be

It is imperative that the child welfare system move beyond a singular focus on safety and permanancy and that it promote the well-being of children in custodial care.

implemented in the context of their impact on foster children's short- and long-term development.

Child Welfare Practices

As a result of ASFA, child well-being is now a performance measure by which state and local child welfare systems will be assessed. However, there is a lack of consensus and clarity on what outcomes demonstrate achievement of the goal of promoting child well-being, to what extent the child welfare system should be responsible for this goal, and what strategies should be utilized to measure child well-being.[79] Given the multiple needs of foster children, it is imperative that the child welfare system move beyond a singular focus on safety and permanency and that it promote the well-being of children in custodial care.

Scholars who have documented the increased rates of health problems, developmental delays, and mental health difficulties in foster children call for universal, ongoing screening and assessment for the "whole" child.[80] In other words, foster children should be assessed for physical, developmental, and mental health problems at foster care entry and then periodically while they are in care. Obviously, a follow-up goal of these assessments should be appropriate intervention for whatever health or developmental needs the children are found to have.[81] Some scholars assert that early intervention and school support for foster children should be routinely offered as a preventive measure.[82]

Given the high rates of mental health difficulties in foster children, appropriate mental health intervention is essential. Preventive approaches designed to promote social skills, self-regulation, and coping in high-risk children have been found to result in positive outcomes.[83] Similarly, interventions to help foster parents support the emotional needs of their foster children have met with success.[84] More targeted intervention services, such as group therapy for foster children with behavioral problems,[85] also have been found to be effective.

Research has documented that foster children are also major consumers of traditional mental health services (for example, individual play therapy and family therapy), much of which is paid for by child welfare dollars as opposed to mental health dollars.[86] However, more evidence is needed regarding the quality of these services. For example, the mental health provider's experience with foster children may increase effectiveness. Additionally, the therapist's willingness and ability to address issues unique to foster children (for example, managing the loss and relationship complexity associated with multiple caregivers) are important factors.

Foster children also need support in negotiating the multiple transitions and family ties that they will experience in foster care. Systemic supports can be established to help children manage these issues. These supports include therapeutic visitation experiences with biological parents, siblings, and other family members; building connections between former and current caregivers; and providing children with "Lifebooks" and other concrete transitional items.[87,88]

Finally, the child welfare system has an obligation to ensure continuity between the various supports that foster children receive. This can be done through a coordinated system of care that is sufficiently flexible to address the individual needs of the child; is comprehensive so that the needs of the "whole" child can be met; places a priority on responding immediately to the vulnerable families of foster children; and ultimately avoids duplication of effort and funds. With the child welfare system at the helm, this type of service network will not only enhance the well-being of foster children and families but will enhance public service delivery in this arena as well.

Conclusion

Children in foster care traverse a challenging journey through childhood, with many obstacles to their optimal development. Many have experienced compromised prenatal environments, maltreatment prior to foster care, or multiple moves while in foster care.

The impact of these experiences on their development can be devastating over the short and long term. However, as with other children at environmental risk, a stable, nurturing family environment can protect foster children against the negative effects of these experiences.

The child welfare system, and its policymakers and practitioners, must ensure safe and stable family environments for children in foster care. Ensuring that each foster child receives a permanent home is a major step toward this goal, but it is not sufficient. The implementation of high-quality programs that document effectiveness in promoting positive family experiences for foster children is essential. In order to create "harm-free, effective environments" for foster children, child welfare systems must provide support and training to foster parents, establish a well-specified model of care to promote child well-being, focus on the positive behaviors of caregivers and children, and create consumer-oriented services that respond specifically to child and family needs.[89]

Although the field continues to debate the relative merits of foster care for children, the fact remains that upwards of half a million American children experience this social service at any given time. As adults who are responsible for the protection and nurture of the young of our species, we have an obligation to ensure that this very vulnerable group of children has the needed opportunities for developmental progress. This should be achieved through appropriate child-centered interventions, as well as through support for the families who care for foster children, whether they are biological parents or relatives, or foster or adoptive caregivers. To paraphrase the eloquent words of Bronfenbrenner, children's development is dependent upon reciprocal activity with others with whom they have a strong and enduring bond, and who are engaged in their developmental progress.[90] The system of child welfare can be engaged in no better developmental enterprise than enhancing its support of these strong, enduring relationships with the ultimate goal of optimizing the development of both children and families in the foster care system.

ENDNOTES

1. Jones Harden, B., and Koblinsky, S. Double exposure: Children affected by family and community violence. In *Family violence.* R. Hampton, ed. Thousand Oaks, CA: Sage Publications, 1999; and Lynch, M., and Cicchetti, D. An ecological-transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology* (1998) 10:235–57.
2. Cicchetti, D., and Toth, S., eds. *Developmental perspectives on trauma: Theory, research, and intervention.* Rochester, NY: University of Rochester Press, 1997.
3. Tolnay, S., and Crowder, K. Regional origin and family stability in northern cities: The role of context. *American Sociological Review* (1999) 64(1):97–112.
4. Wulczyn, F., Hislop, K., and Jones Harden, B. The placement of infants in foster care. *Infant Mental Health Journal* (2002) 23(5):454–75.
5. Dickstein, S., Seifer, R., Hayden, L., et al. Levels of family assessment. II. Impact of maternal psychopathology on family functioning. *Journal of Family Psychology* (1998) 12(1):23–40; Ackerman, B., Kogos, J., Youngstrom, E., et al. Family instability and the problem behaviors of children from economically disadvantaged families. *Developmental Psychology* (1999) 35(1):258–68; and Azar, S. Parenting and child maltreatment. In *Handbook of parenting.* Vol. 4, *Social conditions and applied parenting.* 2nd ed. M. Bornstein, ed. Mahwah, NJ: Lawrence Erlbaum Associates, 2002, pp. 361–88.
6. Emde, R., and Robinson, J. Guiding principles for a theory of early intervention: A developmental-psychoanalytic perspective. In *Handbook of early childhood intervention.* 2nd ed. J.P. Shonkoff and S.J. Meisels, eds. New York: Cambridge University Press, 2000; Bradley, R., Corwyn, R., Burchinal, M., et al. The home environments of children in the United States: Part II. Relations with behavioral development through age 13. *Child Development* (2000) 72:1868–86; Olson, D. The circumplex model of marital and family systems. *Journal of Family Therapy* (2000) 22(2):144–67; and Roderick, H. Family stability as a mediator of the relationship between maternal attributes and child psychosocial adjustment. *Dissertation Abstracts International* (2002) 63(1-B):5548.
7. Cassidy, J., Kirsh, S., and Scolton, K. Attachment and representations of peer relationships. *Developmental Psychology* (1996) 32(5):892–904.
8. McLoyd, V. Socioeconomic disadvantage and child development. *American Psychologist* (1998) 53:185–204.
9. The caregiver fails to adequately provide for or supervise the child.
10. U.S. Department of Health and Human Services, Administration for Children, Youth and Families. *National survey of child and adolescent well-being (NSCAW).* Wave 1 Child Protective Services Report. Washington, DC: DHHS, 2003.
11. See note 2, Cicchetti and Toth.
12. Bolger, K.E., and Patterson, C.J. Pathways from child maltreatment to internalizing problems: Perceptions of control as mediators and moderators. *Development and Psychopathology* (2001) 13:913–40; and Crittenden, P. Child neglect: Causes and contributions. In *Neglected children: Research, practice, and policy.* H. Dubowitz, ed. Thousand Oaks, CA: Sage Publications, 1999.
13. Crittenden, P. Dangerous behavior and dangerous contexts: A 35-year perspective on research on the developmental effects of child physical abuse. In *Violence against children in the family and the community.* P. Trickett and C. Schellenbach, eds. Washington, DC: American Psychological Association, 1998, pp. 11–38; Kaufman, J., and Henrich, C. Exposure to violence and early childhood trauma. In *Handbook of infant mental health.* C. Zeanah, ed. New York: Guilford Publications, 2000; and see note 2, Cicchetti and Toth.
14. Trickett, P., and Putnam, F. Developmental consequences of child sexual abuse. In *Violence against children in the family and the community.* P. Trickett and C. Schellenbach, eds. Washington, DC: American Psychological Association, 1998.
15. Moeller, T., Bachmann, G., and Moeller, J. The combined effects of physical, sexual and emotional abuse during childhood: Long term health consequences for women. *Child Abuse and Neglect* (1993) 17(5):623–40; and Claussen, A., and Crittenden, P. Physical and psychological maltreatment: Relations among types of maltreatment. *Child Abuse and Neglect* (1991) 15(1–2):5–18.
16. Black, M., Hutcheson, J., and Dubowitz, H. Parenting style and developmental status among children with non-organic failure to thrive. *Journal of Pediatric Psychology* (1994) 19(6):689–707.
17. Cassidy, J., and Berlin, L. The insecure/ambivalent pattern of attachment: Theory and research. *Child Development* (1994) 65(4):971–81; and Zeanah, C., Boris, N., and Lieberman, A. Attachment disorders in infancy. In *Handbook of developmental psychopathology.* M. Lewis and A. Sameroff, eds. New York: Basic Books, 2001.
18. Carlson, E. A prospective, longitudinal study of disorganized/disoriented attachment. *Child Development* (1998) 69:1107–28; and Lyons-Ruth, K. Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. *Journal of Consulting and Clinical Psychology* (1996) 64:64–73.
19. Carlson, V., Cicchetti, D., Barnett, D., and Brunwald, K. Finding order in disorganization: Lessons from research on maltreated infants' attachments to their caregivers. In *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect.* D. Cicchetti and V. Carlson, eds. New York: Cambridge University Press, 1989; and Cicchetti, D., and Barnett, D. Attachment organization in maltreated preschoolers. *Development and Psychopathology* (1991) 3(4):397–411.
20. Chisholm, K. A 3-year follow-up of attachment and indiscriminate friendliness in children adopted from Romanian orphanages. *Child Development* (1998) 69(4):1092–1106.
21. DeBellis, M. Developmental traumatology: The psychobiological development of maltreated children and its implications for research, treatment and policy. *Development and Psychopathology* (2001) 13(3):539–64; Perry, B. *Maltreated children: Experience, brain development and the next generation.* New York: W.W. Norton & Co., 1995; and Perry, B., Pollard, R., Blakely, T., et al. Childhood trauma, the neurobiology of adaptation, and "use-dependent" development of the brain: How "states" become "traits." *Infant Mental Health Journal* (1995) 16(4):271–91.
22. Gunnar, M. Quality of early care and buffering of neuroendocrine stress reactions: Potential effects on the developing human brain. *Preventive Medicine* (1998) 27:208–11.
23. Shore, R. *Rethinking the brain.* New York: Families and Work Institute, 1997; and Teicher, M., Andersen, S., Polcari, A., et al.

Developmental neurobiology of childhood stress and trauma. *Psychiatric Clinics of North America* (2002) 25(2):397–426.

24. O'Connor, T., Rutter, M., Beckett, C., et al. The effects of global severe privation on cognitive competence: Extension and longitudinal follow-up. *Child Development* (2000) 71(2):376–90.

25. Dozier, M., Levine, S., Stovall, K., and Eldreth, D. Atypical diurnal rhythms of cortisol production: Understanding foster children's neuroendocrine regulation. Unpublished manuscript, 2001.

26. Atypical cortisol production in young children can result in measurable changes in brain structure and decreased brain volume. See Teicher, M. Wounds that time won't heal: The neurobiology of child abuse. *Cerebrum* (Fall 2000) 2(4):50–67.

27. Gunnar, M. Early adversity and the development of stress reactivity and regulation. In *The effects of adversity on neurobehavioral development: Minnesota Symposium on Child Psychology*, Vol. 31. C.A. Nelson, ed. Mahwah, NJ: Lawrence Erlbaum, 2000, pp. 163–200.

28. See note 25, Dozier, et al.

29. Masten, A. Resilience in individual development: Successful adaptation despite risk and adversity. In *Educational resilience in inner-city America: Challenges and prospects.* M. Wang and E. Gordon, eds. Hillsdale, NJ: Lawrence Erlbaum Associates, 1994, pp. 1–25.

30. Cicchetti, D., and Lynch, M. Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. In *Children and violence.* D. Reiss, J. Richters, M. Radke-Yarrow, and D. Scharff, eds. New York: Guilford Press, 1993, pp. 96–118; and Heller, S., Larrieu, J., and D'Imperio, R. Research on resilience to child maltreatment: Empirical considerations. *Child Abuse and Neglect* (1999) 23(4):321–38.

31. American Academy of Pediatrics. Health care of young children in foster care. *Pediatrics* (2000) 109:536–39.

32. See note 10, DHHS.

33. Jonson-Reid, M., and Barth, R. From maltreatment to juvenile incarceration: The role of child welfare services. *Child Abuse and Neglect* (2000) 24:505–20; and Horwitz, S., Balestracci, K., and Simms, M. Foster care placement improves children's functioning. *Archives of Pediatric Adolescent Medicine* (2001) 155:1235–60.

34. Taussig, H., Clyman, R., and Landsverk, J. Children who return home from foster care: A 6-year prospective study of behavioral health outcomes in adolescence. *Pediatrics* (2002) 108:62–68; and Barth, R., and Blackwell, D. Death rates among California's foster care and former foster care populations. *Children and Youth Services Review* (1998) 20:577–604.

35. Rutter, M. Children in substitute care: Some conceptual considerations and research implications. *Children and Youth Services Review* (2000) 22:685–703; and see note 10, DHHS.

36. Frame, L. Maltreatment reports and placement outcomes for infants and toddlers in out-of-home care. *Infant Mental Health Journal* (2002) 23(5):517–40; and see note 4, Wulczyn, et al.

37. See note 1, Jones Harden and Koblinsky; Frank, D., Augustyn, M., Grant-Knight, W., et al. Growth, development, and behavior in early childhood following prenatal cocaine exposure: A systematic review. *Journal of the American Medical Association* (2001) 285:1613–25; and Zuckerman, B., Frank, D., and Mayes, L. Cocaine-exposed infants and developmental outcomes: "Crack" kids revisited. Journal of the American Medical Association (2002) 287(15):1990–91.

38. Halfon, N., Mendonca, A., and Berkowitz, G. Health status of children in foster care. *Archives of Pediatric and Adolescent Medicine* (1995) 149:386–92.

39. Simms, M., and Halfon, N. The health care needs of children in foster care: A research agenda. *Child Welfare* (1994) 73:505–24; and Horwitz, S., Owens, P., and Simms, M. Specialized assessments for children in foster care. *Pediatrics* (2000) 106:59–66.

40. U.S. Department of Health and Human Services, Administration for Children, Youth and Families. *National survey of child and adolescent well-being (NSCAW).* One-Year Foster Care Report. Washington, DC: DHHS, 2001.

41. Leslie, L., Gordon, J., Ganger, W., and Gist, K. Developmental delay in young children in child welfare by initial placement type. *Infant Mental Health Journal* (2002) 23(5):496–516.

42. Konenkamp, K., and Ehrle, J. *The well-being of children involved with the child welfare system: A national overview.* Washington, DC: Urban Institute, 2002; and Sawyer, R., and Dubowitz, H. School performance of children in kinship care. *Child Abuse and Neglect* (1994) 18:587–97.

43. See note 10, DHHS.

44. See note 25, Dozier, et al.

45. Stein, E., Evans, B., Mazumdar, R., and Rae-Grant, N. The mental health of children in foster care: A comparison with community and clinical samples. *Canadian Journal of Psychiatry* (1996) 41:385–91.

46. See note 10, DHHS; and Clausen, J.M., Landsverk, J., Ganger, W., et al. Mental health problems of children in foster care. *Journal of Child and Family Studies* (1998) 7:283–96.

47. Garland, A., Landsverk, J., Hough, R., and Ellis-MacLeod, E. Type of maltreatment as a predictor of mental health service use for children in foster care. *Child Abuse and Neglect* (1996) 20:675–88; and see note 38, Halfon, et al.

48. Kaufman, J., Birmaher, B., Brent, D., et al. Psychopathology in the relatives of depressed-abused children. *Child Abuse and Neglect* (1998) 22:204–13.

49. Wilson, D., and Stukes Chipungu, S., eds. *Child Welfare. Special Issue: Kinship Care* (1996) 75(5); and see note 10, DHHS.

50. See note 34, Taussig, et al.

51. Courtney, M. Factors associated with entrance into group care. In *Child welfare research review.* Vol. 1. R. Barth, J. Berrick, and N. Gilbert, eds. New York: Columbia University, 1994, pp. 185–204.

52. Berrick, J., Courtney, M., and Barth, R. Specialized foster care and group home care: Similarities and differences in the characteristics of children in care. *Children and Youth Services Review* (1993) 15:453–74.

53. See note 40, DHHS.

54. Jones Harden, B. Congregate care for infants and toddlers: Shedding new light on an old question. *Infant Mental Health Journal* (2002) 23(5):476–95.

55. Staff, I., and Fein, E. Stability and change: Initial findings in a study of treatment foster care placements. *Children and Youth Services Review* (1995) 17(3):379–89.

56. Smith, D., Stormshak, E., Chamberlain, P., and Bridges, R. Placement disruption in treatment foster care. *Journal of Emotional and Behavioral Disorders* (2001) 9(3):200–05; and Redding, R., Fried, C., and Bitner, P. Predictors of placement outcomes in treatment foster care: Implications for foster parent

selection and service delivery. *Journal of Child and Family Studies* (2000) 9(4):425–47.

57. Berrick, J., Needell, B., Barth, R., and Jonson-Reid, M. *The tender years.* New York: Oxford University Press, 1998; and see note 55, Staff and Fein.

58. Wulczyn, F., Kogan, J., and Jones Harden, B. Placement stability and movement trajectories. *Social Service Review* (2003) 77:212–36.

59. Courtney, M., and Needell, B. Outcomes of kinship care: Lessons from California. In *Child welfare research review*. Vol. 2. J. Berrick, R. Barth, and N. Gilbert, eds. New York: Columbia University, 1997.

60. Terling-Watt, T. Permanency in kinship care: An exploration of disruption rates and factors associated with placement disruption. *Children and Youth Services Review* (2001) 23(2):111–26.

61. See note 57, Berrick, et al.

62. Horwitz, S., Simms, M., and Farrington, R. Impact of developmental problems on young children's exits from foster care. *Developmental and Behavioral Pediatrics* (1994) 15:105–10.

63. See note 10, DHHS.

64. Newton, R., Litrownik, A., and Landsverk, J. Children and youth in foster care: Disentangling the relationship between problem behaviors and number of placements. *Child Abuse and Neglect* (2000) 24(10):1363–74.

65. See note 56, Smith, et al.; and note 55, Staff and Fein.

66. Martin, H., and Beezly, P. Behavioral observations of abused children. *Developmental Medicine and Child Neurology* (1977) 19:373–87; and Dubowitz, H., Zuravin, S., Starr, H., et al. Behavior problems of children in kinship care. *Developmental and Behavioral Pediatrics* (1993) 14:386–93.

67. Bronfenbrenner, U. The ecology of human development: Experiments by nature and design. Cambridge: Harvard University Press, 1979.

68. See note 67, Bronfenbrenner.

69. Orme, J., and Beuhler, C. Foster family characteristics and behavioral and emotional problems of foster children: A narrative review. *Family Relations* (2001) 50(1):3–15.

70. Zuravin, S., Benedict, M., and Somerfield, M. Child maltreatment in family foster care: Foster home correlates. In *Child welfare research review*. Vol. 2. J. Berrick, R. Barth, and N. Gilbert, eds. New York: Columbia University, 1997.

71. Fanshel, D., Finch, S., and Grundy, J. *Foster care in a life course perspective.* New York: Columbia University, 1990.

72. Simms, M., and Horwitz, S. Foster home environments: A preliminary report. *Journal of Developmental and Behavioral Pediatrics* (1996) 17(3):170–75.

73. Clyman, R., Jones Harden, B., and Little, C. The family environments of preschool children in foster and kinship care. Unpublished manuscript, 2003.

74. Stone, N., and Stone, S. The prediction of successful foster placement. *Journal of Contemporary Social Work* (1983) 1:11–17.

75. Feshbach, N. The construct of empathy and the phenomenon of physical maltreatment of children. In *Child maltreatment*. D. Cicchetti and V. Carlson, eds. New York: Cambridge University Press, 1989.

76. Hegar, R., and Scannapieco, M., eds. *Kinship foster care: Policy, practice and research.* New York: Oxford University Press, 1999; and see note 49, Wilson and Stukes Chipungu.

77. Wulczyn, F., Hislop, K., and Goerge, R. *Foster care dynamics 1983–1998.* Chicago: Chapin Hall Center for Children, 2001.

78. See note 77, Wulczyn, et al.; and note 49, Wilson and Stukes Chipungu.

79. Altshuler, S., and Gleeson, J. Completing the evaluation triangle for the next century: Measuring child "well-being" in family foster care. *Child Welfare* (1999) 78(1):125–47.

80. Dale, G. Universal developmental screening. In *The foster care crisis: Translating research into practice and policy*. P. Curtis, G. Dale, and J. Kendall, eds. Lincoln, NE: University of Nebraska Press, 1999; and see note 39, Horwitz, et al.

81. Specialized health monitoring and intervention programs such as the Health Passport have been found to be effective for foster children. See Lindsay, S., Chadwick, J., Landsverk, J. and Pierce, E. A computerized health and education passport for children in out-of-home care: The San Diego model. *Child Welfare* (1993) 72(6):581–94.

82. See note 41, Leslie, et al.; and Ayasse, R. Addressing the needs of foster care: The foster youth services program. *Social Work in Education* (1995) 17(4):207–16.

83. Webster-Stratton, C., and Herbert, M. *Troubled families—problem children*. New York: Wiley & Sons, 1994.

84. Chamberlain, P., Fisher, P., and Moore, K. Multidimensional treatment foster care: Applications of the OSLC intervention model to high-risk youth and their families. In *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention*. J. Reid and G. Patterson, eds. Washington, DC: American Psychological Association, 2002, pp. 203–18.

85. Fisher, P., Gunnar, M., Chamberlain, P., and Reid, J. Preventive intervention for maltreated preschool children: Impact on children's behavior, neuroendocrine activity, and foster parent functioning. *Journal of the American Academy of Child and Adolescent Psychiatry* (2000) 39:1356–64.

86. Landsverk, J. Caring for children in child welfare. Paper presented at the biennial meeting of the Society for Research in Child Development. Tampa, FL. April 24–27, 2003; Leslie, L., Landsverk, J., Ezzet-Lofstrom, R., et al. Children in foster care: Factors influencing outpatient mental health service use. *Child Abuse and Neglect* (2000) 24:465–76.

87. A "Lifebook" is a developmentally appropriate record and collection of mementos that document a child's life events and various caregivers and homes. Concrete transitional items would include favorite toys obtained from former placements.

88. Jones Harden, B. How do I help children adjust to out-of-home-care placement? In *Handbook for child protection practice*. H. Dubowitz and D. DePanfilis, eds. Thousand Oaks, CA: Sage Publications, 2000, pp. 420–24.

89. Daly, D., and Dowd, T. Characteristics of effective, harm-free environments for children in out-of-home care. *Child Welfare* (1992) 71(6):487–96.

90. See note 67, Bronfenbrenner.