International Perspectives in Psychology: Research, Practice, Consultation

AQ: 1

© 2015 American Psychological Association 2157-3883/15/\$12.00 http://dx.doi.org/10.1037/ipp0000033

Research on Institutionalized Children: Implications for International Child Welfare Practitioners and Policymakers

Robert B. McCall and Christina J. Groark
University of Pittsburgh

This paper reviews the empirical literature on the effects of institutionalization on young children's development from the perspective of global child welfare practice and policy. It considers the characteristics of typical institutions, how to assess the quality of care in institutions, the level of physical and behavioral/mental development of infants and young children while residing in institutions, the crucial role of caregiver—child interactions in children's development, the potential of children to developmentally improve when institutional caregiver—child interactions improve or children are transferred to families, and the influence of the quality of care on children's development regardless of context. Several controversies are considered in a balanced fashion and from the standpoint of the nature of the evidence, such as care as typically practiced versus more ideal care, intercountry adoptions, improving institutions, and volunteers in institutions. Implications for practice and policy are identified throughout, especially factors that characterize successful large-scale attempts to transition from institutionalization to a system of family alternatives.

Keywords: institutionalization, children's development, quality of care, domestic and intercountry placements

By one estimate, there are 153 million vulnerable children worldwide living in adversity (USAIDS, UNICEF, and USAID, 2004), including those residing in institutions, on the street, in refugee camps, and in informal kinship and community care, as well as those who are trafficked for child labor or sexual exploitation, recruited as child combatants in armed conflicts, runaways, and those separated from their families by natural disasters. Of these, only a relatively small percentage, approximately 2–8 million or about 5% by some estimates (Save the Children, 2009; USAID, 2009), reside in institutions.

However, institutionalized children have been the focus of a disproportionate amount of research on their development during institutionalization and especially after being transiResearch on the development of children residing in institutions is not new. For example, Spitz (1946) described such children to be extremely delayed and lethargic (e.g., "anaclitic depression"), presumably for lack of "mothering." Similarly, Bowlby (1952), in a report to the World Health Organization, observed that most institutionalized children were extremely delayed in development because of the lack of stable and continuous attachment relationships with caregivers even when their physical needs

were met. Early researchers also demonstrated

that institutionalized children who were given

better care, even by mentally limited women

tioned to families (hereinafter called postinsti-

tutional = PI). Further, much international child

welfare advocacy, practice, and policy is aimed

at efforts to move children out of institutions

and into family alternatives in low-resource

Robert B. McCall and Christina J. Groark, Office of Child Development, University of Pittsburgh.

Correspondence concerning this article should be addressed to Robert B. McCall, Office of Child Development, University of Pittsburgh, 400 North Lexington Street, Pittsburgh, PA 15208. E-mail: mccall2@pitt.edu

countries that traditionally have relied on institutions to care for children without permanent parents. Indeed, a large percentage of children in institutions have at least one living biological parent who potentially could rear the child, perhaps with support services (Davis, 2006; Richter & Norman, 2010; Williamson & Greenberg,

AQ: 2

2010).

McCALL AND GROARK

(Skeels & Dye, 1939), very minimal additional stimulation (Dennis & Najarian, 1957), or were transitioned to families (Tizard & Rees, 1974), improved developmentally, providing retrospective testimony to the deleterious effects of typical institutional environments.

2

Such research has undergone a renaissance in the past two decades, stimulated by the 1989 fall of the Ceausescu regime in Romania and the revelation of large numbers of children housed in exceedingly deficient institutions, followed by the adoption of many of these children and those from other countries. This provided developmental researchers with an opportunity to observe the role of early environmental deprivation on children's longer-term development, a fundamental question in developmental sciences but one that is otherwise difficult to study. The result has been a rather substantial literature, primarily on the development of postinstitutionalized (PI) children typically adopted into affluent and well-educated European and North American families. More recently, studies have also focused on contemporary institutions and the development of children currently residing in institutions, interventions designed to improve care in the institutions, and the development of children transitioned out of institutions to families (McCall, Groark, & Rygaard, 2014; McCall, van IJzendoorn, Juffer, Groark, & Groza, 2011; van IJzendoorn & Juffer, 2006).

Simultaneously, international child welfare organizations issued documents providing recommendations and guidelines regarding the care of such children (United Nations, 1989, 2010). Recently, organizations have attempted to review the literature on vulnerable children and craft global policies for their care (The Way Forward Project, 2011; US Government, 2012; Williamson & Greenberg, 2010). Although these documents consider the broad range of vulnerable children, one major premise of each report is that institutionalization is harmful to children and should be avoided in favor of family care alternatives, such as having children remain with or be reunified with biological families after brief institutionalization or placing children as soon as possible into appropriate adoptive, foster, kinship, or kafala (a guardianship practiced under Islam) families.

Some attempts to create in a state/province or entire country a modern child welfare system that emphasizes family alternatives to institutionalization have been relatively successful (Greenberg & Partskhaladze, 2014; Johnson, Dovbnya, Morozova, Richards, & Bogdanova, 2014), whereas substantial challenges confront such a task in other countries (Engle et al., 2011; McCall, 2011; McCall et al., 2014), including cultural resistance, lack of resources, lack of political will, and other factors. Even when family placements increase it may not be sufficient to compensate for the increasing number of vulnerable children (Groza & Bunkers, 2014). So many children are likely to continue to be raised in institutions in many places around the world.

The purpose of the present article is not to duplicate the extensive, detailed, and comprehensive reviews of research on institutionalized children that have already been produced (McCall et al., 2011; US Government, 2011), but to summarize the empirically based principles from this literature that are relevant to international child welfare practice and policy professionals. Also, this summary examines some of the limitations and qualifications of the existing literature and controversial issues important to practice and policy.

Evidence-Based Principles

The Number of Children Outside of Family Care and the Extent of Their Adverse Circumstances are Difficult to Accurately Determine

Difficulties. One reason is the definition of vulnerable children. USAID (2009) defines such children as those missing at least one parent. This is an extremely broad definition, and the level of adversity may vary substantially within this group, from essentially no risk to extreme deprivation and stress. Although progress has been made in estimating children in specific vulnerable circumstances (e.g., sexual trafficking, child labor, soldiers, on the street, etc.), such estimates are approximate at best and costly to make (US Government, 2011).

Second, even estimating the number of institutionalized children can be challenging (Engle et al., 2011; Groark, McCall, & Li, 2010). Some countries do not count or record the number of children in institutions (Walakira, Ochen, Bukuluki, & Allan, 2014), some do not count those in institutions operated by

RESEARCH ON INSTITUTIONALIZED CHILDREN: IMPLICATIONS

nongovernmental organizations (NGOs), children may not be counted if their parents have not legally relinquished the child, and children who move in and out of institutions may be counted more than once.

Implications. An accurate estimate of the number of institutionalized children is very difficult to obtain. International child welfare practitioners and policymakers need to determine for the specific country in which they work precisely how such children are defined and counted (or not) as a means of charting over years the extent and nature of the child welfare task and progress toward achieving its goals (Groark et al., 2010).

Nevertheless, reasonable estimates sometimes can guide practice and policy. For example, although there are approximately 12 million children in sub-Saharan Africa categorized as "orphans," more than 80% of such children have a surviving parent (Richter & Norman, 2010; USAIDS, UNICEF, and USAID, 2004; Williamson & Greenberg, 2010). Presumably, this fact provides some basis for emphasizing systems to prevent family separation and encourage reintegration into biological families accompanied by appropriate financial and social supports.

The Nature of Institutional Care Varies and the Published Literature May Not Be Representative

Institutional care can vary, sometimes substantially, from one institution to another in a given country, from one country to another, and even over time within a single country. Further, children internationally adopted from some countries (e.g., South Korea, China) have been found to develop more typically than PI children from other countries, either because their institutions provided better care or more typically developing children were selected for intercountry adoption (McCall, 2011). Also, some countries have known health risks (e.g., HIV/AIDS, higher maternal prenatal drug and alcohol abuse rates, perinatal risk factors, etc.) that can influence children's long-term development (Johnson, 2000a, 2000b).

The nature of motivational care. Until recently, information about the nature and quality of care in institutions was largely an-

ecdotal, often based on reports of researchers, parents, and adoption personnel (i.e., "key informants") who had visited the institution or who had received second-hand reports (Lee, Seol, Miller, Sung, & Minnesota International Adoption Project Team, 2010; Rosas & McCall, 2011). In the last few years, several empirical studies have described the nature of institutions, primarily in the Russian Federation, Ukraine, Romania, China, and Central America (Groark et al., 2013; Groark, McCall, Fish, & The Whole Child International Team, 2011; Johnson et al., 2010; Smyke et al., 2007; St. Petersburg-U.S.A. Orphanage Research Team, 2005, 2008). These empirical reports describe institutions to be similar to the anecdotal reports, but both tend to come from countries willing to have institutions examined (often by foreign professionals) and those institutions willing to participate in intervention studies to improve the quality of care, which may be especially unique. Even in such institutions, some wards may be off limits and not available for walkthrough observations.

Despite these restrictions and limitations (or because of them), the published anecdotal and empirical reports of institutions worldwide converge on certain common characteristics (Rosas & McCall, 2011), although variation can be substantial:

- 1. Nearly all the published literature (and that summarized in this report) pertains to rearing conditions for infants and young children, even if the institution also has older children in residence.
- Infants and young children are housed in relatively large groups or wards (e.g., 10-30 but occasionally more than 50).
- 3. The number of children per caregiver available during waking hours can be fairly high (e.g., 6–10 or more), even if the ward contains infants in their first year of life.
- 4. Many different caregivers may serve the same group of children, possibly working long shifts (up to 24 hours) and then being off for three days. Consequently, children may experience more than a dozen caregivers in a week and no caregivers on two consecutive days. Further, with vacations, staff turnover, child graduation practices

McCALL AND GROARK

- (see below), and other factors, children may be exposed to as many as 60–100 different caregivers in the first two years of life (St. Petersburg-U.S.A. Orphanage Research Team, 2008).
- Children are typically housed in relatively homogenous age groups, and then they are "graduated" to new groups of children and caregivers when they reach certain developmental milestones (e.g., crawling, walking, age 2).
- Children with disabilities are often segregated into special wards or separate institutions (especially those with HIV or AIDS).
- 7. Care is often highly regimented, with all children in a group fed at the same brief period of time, put to bed simultaneously, and play and participate in music and physical activities as a group.
- 8. Caregiver—child interactions are typically limited to routine caregiving chores (feeding, bathing, changing), conducted in a perfunctory and business-like manner with limited social interaction; crying is left unattended; and caregivers do not play with children or provide them with warm, sensitive, contingently responsive, and one-on-one interactions. There is limited reciprocal verbal or nonverbal caregiver—child "conversation."

Of course, some institutions are better than others, at least with respect to some of these characteristics (Dobrova-Krol, van IJzendoorn, Bakermans-Kranenburg, & Juffer, 2010; Gavrin & Sacks, 1963; SOS Children's Villages International, 2014; Vorria et al., 2003; Wolf & Fesseha, 1998). Nevertheless, the above description is relatively characteristic of many institutions as currently practiced.

Items 1–7 above pertain to the *structural characteristics* of the institutions, whereas item 8 pertains to the quality of *caregiver*-*child interactions*. Some institutions are described in the research literature (Gunnar, 2001) as being *globally deficient*, in which the medical care, nutrition, sanitation, safety, and the caregiver-child interactions described above are all deficient (e.g., the 1990s Romanian orphanages; Wright, Lamsal, Ksetree, Sharma, & Jaffe, 2014). *Social-emotionally*

deficient institutions tend to have at least minimally acceptable medical care, nutrition, sanitation, and safety, but they are deficient in their structural characteristics and caregiverchild interactions (St. Petersburg-U.S.A. Orphanage Research Team, 2005, 2008). Finally, even in institutions in which caregivers provide more exemplary caregiver-child interactions, poor structural characteristics can limit their ability to do so. For example, it is difficult to provide many one-on-one reciprocal caregiver-child interactions if there is only one caregiver for 8–10 infants and toddlers. Thus, the above list (items 1-8) plus medical care, nutrition, sanitation, and safety (which may be more difficult to observe) constitute at least a simple checklist of basic institutional quality.

A comparison of these characteristics of typical institutions with those of most families is instructive. Families have few caregivers, they are stable and constant for the most part, there are relatively few children of mixed ages and few children per caregiver, and children do not change families periodically. Although these characteristics are believed to contribute to children's healthy development, most institutions are typically structured quite oppositely. The structure, operation, and practices of institutions have likely emerged over decades and for certain reasons (e.g., convenience, minimizing work load, health and safety, protection of infants from older children, the urging of funders, etc.). But those practices and reasons are rarely examined from the standpoint of what practices might be better for children's mental and social-emotional development. Making these comparisons with institution directors, professionals, and staff can sometimes stimulate institutions to change (Groark & Mc-Call, 2011a, 2011b).

Implications for assessing institutional quality. Child welfare practitioners and policymakers frequently need to know the quality of care provided by institutions, but a simple "walk-through" tour of an institution is likely to provide an incomplete or atypical impression of conditions. For example, some structural characteristics may be observable (e.g., number of children per caregiver, homogenous grouping by age and disabilities), but others will not (i.e., number of different

more formal guides to such observations, see

caregivers who care for the same children in a week or year, periodic graduations). Some institutions may "tidy up" if they know visitors are coming, even increase the number of alleged "staff" on the wards. Guests are often shown equipment, shelves of toys, and special activity rooms (e.g., physical exercise, multistimulation, music rooms), but the extent to which children use them is uncertain. The nature of every-day caregiver-child interactions may not be evident, because caregivers either become more engaged with children or conversely step aside when visitors arrive to allow them to interact with the children. A better indicator is to make an observational snapshot of what is happening (or not) when the door to a ward is first opened, but even then caregivers may have been alerted that observers are in the building.

Therefore, it is helpful for professionals to spend more than a few minutes in each ward and to ask a set of questions regarding the structure and operation of the institution. Further, it is important to attend to caregiver and child behaviors that DO NOT occur as much as to those that do. For example, are caregivers engaged, spend one-on-one time with individual children, and respond to children's needs and initiatives? Similarly, are children responsive to caregivers (e.g., do infants raise their arms to be picked up when a caregiver arrives, do older children verbally make requests and try to converse with caregivers)? These are signs that the children are accustomed to such interactions. To what extent do children display behaviors that are common among young institutionalized children but would be atypical of children reared in a family? These include indiscriminate friendliness (children who readily come up to the visitor and touch or hug them), stereotypic or self-stimulating behaviors (rocking back and forth, repetitive waving of the arms, head banging), severe and prolonged withdrawal without visually attending to the environment, and lack of behavioral and emotional control (excessive activity, uncontrolled interference in other children's activities, aggressiveness). While caregivers may be on their best behavior for visitors, children may be the best clue regarding the quality of care that typically transpires in an institution (for

Groark et al., 2013a, 2013b). Unfortunately, there are almost no data on the quality of care in family alternative environments (i.e., foster care, kinship care, biological families) in low-resource countries, and the quality of care (see below) may be more important than the type of care. Presumably, the structural characteristics of a family environment might be expected to be substantially better than most institutions (see above), but the quality of caregiver-child interactions in a family is not assured. When foster parents are paid per child with no monitoring, they can have many children and poor caregiver-child interactions, and families in some very low-resource environments may treat kinship children much less favorably than their own biological children (Leinaweaver, 2014). Thus, programs to improve family care environments need to consider cultural norms and traditions, thorough preplacement screening of families, financial and professional supports, and periodic monitor-

Infants and Young Children Residing in Institutions as Typically Operated Develop Poorly in Nearly Every Respect Compared to Noninstitutionalized Children Reared in Families

ing of caregiver-child interactions.

This literature is fairly large and focuses mainly on children's physical growth and general behavioral development (measured by standardized tests that usually embody cognition, language, personal-social, motor, and adaptive behaviors).

Children's development. On average, institutionalized infants and young children are approximately 1–1.5 standard deviations below the mean of noninstitutionalized homereared children with respect to their length/height, weight, head circumference, and general behavioral/mental development (Juffer et al., 2011; van IJzendoorn, Bakermans-Kranenburg, & Juffer, 2007; van IJzendoorn, Luijk, & Juffer, 2008; van IJzendoorn et al., 2011). But it is not unusual to have institutionalized children average substantially below these levels. For example, in three institutions in St. Petersburg, Russian Federation (St. Petersburg-U.S.A. Orphanage

-

Research Team, 2005) and six institutions in Central America (Groark et al., 2011, 2013a), young institutionalized children averaged more than 1.5 standard deviations below non-institutionalized children, and approximately half would fall in the lowest 10% of noninstitutionalized U.S.A. children on physical growth and mental development.

Implications. Substantial percentages of infants and young children who spend the early months of their lives in substandard institutions are markedly delayed in their physical, behavioral, mental, and social-emotional development. It is important to recognize that this principle pertains to infants and young children and to institutional care as currently practiced, and that many such children are developmentally delayed when they arrive at these institutions (St. Petersburg-U.S.A. Orphanage Research Team, 2005). Nevertheless, institutional rearing maintains them at delayed levels of development.

This observation is one of several that provide the research basis for urging that children should be placed in more supportive environments, presumably families if available, as early as possible. The Guidelines for the Alternative Care of Children (United Nations, 2010) call for exclusive family care for children under 3 years except in the case of emergencies and when separation is for a predetermined and limited duration.

Caregiver-Child Interactions Play a Crucial Role in Institutionalized Children's Development

Caregiver-child interactions. The psychosocial short stature hypothesis or psychosocial dwarfism syndrome (Blizzard, 1990; Johnson, 2000a, 2000b; Johnson & Gunnar, 2011) stipulates that infrequent and inadequate caregiver-child social-emotional interactions contribute to poor physical growth; and when caregiver-child interactions are improved in an institution, children's physical development improves even without changes in nutrition (St. Petersburg-U.S.A. Orphanage Research Team, 2008). Also, institutionalized children's ratios of weight-to-height are typically not nearly as low as their heights and weights, a fact suggesting that their short stature is less associated with malnutrition than quality of caregiver-child interactions. Of course, extremely poor nutrition can stunt growth, and even well-fed institutionalized children may be malnourished in terms of micronutrients, especially iron, not only because of iron-deficient diets but because institutionalized children's bodies use up the iron in their diets to support other physiological processes and as a result may be iron-deficient (Johnson & Gunnar, 2011).

The lack of caregiver-child interactions, talking, and one-on-one contingent responsiveness also contribute to the child's general behavioral and mental deficiencies (McCall, 2011; Rutter et al., 2007, 2010). Numerous studies providing institutionalized children with specific sensory and perceptual stimulation plus interventions that deliberately increase the social and educational quality of caregiver-child interactions have led to substantially improved children's general behavioral and mental development (St. Petersburg-U.S.A. Orphanage Research Team, 2008; Sparling, Dragomir, Ramey, & Florescu, 2005).

Consistent with attachment theory (i.e., Ainsworth, 1979; Ainsworth, Bell, & Stayton, 1974; Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1958, 1969/1997, 1980/1998), institutionalized children have much higher rates of insecure and disorganized attachments even to their favorite caregiver or the one who knows the child best as assessed by the Strange Situation Procedure (Bakermans-Kranenburg et al., 2011). Across studies of institutionalized infants and toddlers, approximately 73% displayed disorganized attachment or were unscoreable, whereas this might be expected in only approximately 15% of low-risk, noninstitutionalized, parent-reared children (Bakermans-Kranenburg et al., 2011). Disorganized attachment is characterized by "fear without solution" in which the infant both seeks comfort from the caregiver but is also afraid of the caregiver. Among parent-reared children disorganized attachment predicts a variety of behavior and psychiatric problems in childhood and adolescence (Carlson, 1998).

Implications. Caregiver-child interactions and relationships are one of the most crucial aspects of care for the development of infants and young children, so when assessing

RESEARCH ON INSTITUTIONALIZED CHILDREN: IMPLICATIONS

the quality of care provided by an institution (see above), concentrate on caregiver-child interactions and children's behavior more than on the physical facilities, which policy-makers and institutional administrators too often emphasize. A focus on caregiver-child interactions is equally important in family settings.

Intervention Studies, Largely Aimed at Enhancing Caregiver-Child Interactions, Have Consistently Demonstrated Improvements in Institutionalized Children's Physical and General Behavioral/Mental Development

Interventions. Children's improvements are greater the more comprehensive and intensive the social-emotional and caregiver—child interaction intervention (McCall, 2013; St. Petersburg-U.S.A. Orphanage Research Team, 2008). Indeed, when the institutional environment was structurally made more family like and caregivers provided better social-emotional interactions with children, children's physical and behavioral/mental development improved very substantially (including for children with disabilities), fewer children displayed disorganized attachment, and atypical behaviors were reduced (St. Petersburg-U.S.A. Orphanage Research Team, 2008).

Implications. Institutions do not have to operate in the way many do; they could deliver much better caregiver-child interactions in more family like environments and children's physical, behavioral, mental, and social-emotional development could be much better than it is in many institutions as currently operated (Groark & McCall, 2011a, 2011b). Changing institutions that have operated traditionally for decades can be challenging, but it can be done. Caregivers need periodic training in behaviors known to enhance caregiver-child relationships, such as mutual engagement, following a child's lead, displaying appropriate adult affect, and having reciprocal conversations with children (St. Petersburg-U.S.A. Orphanage Research Team, 2008). But training alone is not sufficient; it must be accompanied by on-the-ward coaching and structural/operational changes that reduce group sizes and provide children

with fewer and more consistent caregivers over time.

When Infants and Young Children are Removed from Institutions and Placed in Adoptive Homes and High-Quality Foster Care, They Improve Dramatically

These children display immediate and substantial catch-up in most domains of physical and behavioral growth, and most become attached to their parents. This literature provides retrospective testimony that the institutions were inferior to families that provide much better rearing environments (van IJzendoorn & Juffer, 2006).

However, Length of Exposure to the Institution Is Related to Children's Long-Term Development and Adjustment

Length of exposure. In many countries, the majority of children arrive at institutions in the first weeks or months of life. If such children are removed from the institutions at a young age and placed in a high-quality family, there are no apparent long-term consequences of having been institutionalized. This is even true of children from the most deplorably deficient institutions. But the definition of "a young age" depends on the extent of the deficiency of the institutional environment. For children from the very severely deficient 1990s Romanian institutions, it can be as little as 6 months; for children from some social-emotional depriving institutions it may be 18 months; and it could be longer for children from even better institutions (McCall, 2013; Kreppner et al., 2007; Zeanah, Gunnar, McCall, Kreppner, & Fox, 2011).

In contrast, a very extensive literature (Julian, 2013) shows that children transitioned from institutions to family care (primarily adoptive but also some foster care) after these critical ages display higher rates of delays and long-term deficiencies in physical development (Johnson & Gunnar, 2011;), cognitive development (van IJzendoorn, Juffer, & Poelhuis, 2005), behavior problems (Hawk & McCall, 2010, 2011), and psychiatric problems (Bos et al., 2011). More specifically, such children display higher rates of deficiencies in executive functioning, such as attentional control, short-term memory (STM), cognitive

McCALL AND GROARK

inhibition, set shifting (Merz & McCall, 2011), and language development (Windsor et al., 2011), all of which are related to poorer subsequent academic performance. Although most PI children form attachments to their adoptive and foster parents, later adopted postinstitutionalized children have higher rates of attachment problems (e.g., reactive attachment disorders) and higher rates of indiscriminate friendliness (Bakermans-Kranenburg et al., 2011; Bos et al., 2011). Although behavioral and social-emotional problems can occur at any age, some studies have found higher-than-expected rates of such problems to occur primarily during adolescence (Julian, 2013; McCall, 2013).

This large and consistent literature may be the strongest evidence for the potentially corrosive effects of early institutionalization as typically practiced. Further, reviews of adults who have been institutionalized as young children tend to demonstrate similar kinds of persistent problems at somewhat higher rates than would be expected of non-PI adults, suggesting that such problems are not simply a temporary, exaggerated, troubled adolescence (Julian, 2009).

Note that the risk for longer-term problems often increases precipitously after exposure to a deficient institution for a specific length of time rather than progressively with increased exposure to institutions. This finding provokes speculation that there is an early sensitive period during which exposure to an inadequate environment has maximum long-term effects. However, genetics may also play a role. First, not all children exposed for long periods of time to a deficient institution display long-term developmental deficiencies and problems, which suggests that genetic susceptibility (genetic polymorphisms) to a poor environment may influence outcomes. Second, the precipitous increase of risk and the fact that the critical age varies with the severity of the institution suggest an epigenetic phenomenon in which exposure to a poor environment has cumulative effects up to a point at which some genes are turned on or off and thus dispose some children to long-term poor outcomes. Of course, other factors may contribute to which children have poorer outcomes. These can include perinatal risk factors (although if children are placed in good quality family care such factors do not seem to play a predominate role), preinstitutionalization experience (e.g., abused or neglected, prolonged residence in a hospital, care in a family), and the nature of the postinstitutional rearing environment (especially the quality of caregiver—child interactions and relationships).

Implications. From a practical standpoint, these data suggest that infants and young children are most at risk of suffering poor outcomes if placed in poor quality institutions in the first years of their lives. Although children exposed to institutions for only the first few months of life—or even a year or two in better quality institutions—do not seem to be adversely affected, no one will know how long infants can reside in a particular institution before poor developmental consequences are produced. Thus, the best option is for children not to be sent to institutions in the first place if better quality family or family like environments are available; if they must be sent to institutions, they should be transitioned to better environments, preferably high-quality families, as soon as possible.

Unfortunately, in many countries there are practices and policies that prolong children's residency in institutions before transitioning to families, and practitioners and policymakers could examine whether such practices are necessary. Agreed, birth parents must not be unnecessarily rushed or coerced to legally relinquish their children, but it is not in the child's best interest for this procedure to be unnecessarily prolonged. For example, a grace period during which a birth parent can change their mind about relinquishing their child should be given immediately after the parent gives the child up, not later after adoptive or foster parents are assigned. Adoptive and foster parents could be selected and trained before, not after, a specific child is identified for them. Undocumented (i.e., abandoned without birth certificates) children may never be eligible for adoption in some countries, and children whose parents have not relinquished rights may not be fostered. Administrative and court proceedings can also lengthen the process of family placement, sometimes unnecessarily. These practices and policies should be examined to create a better balance of rights-including the child's right to a family as soon as possible. RESEARCH ON INSTITUTIONALIZED CHILDREN: IMPLICATIONS

The Quality of the Family Environment Likely Influences the Extent of Children's Development After Institutionalization

Quality of care in families. Adoption is associated with the best developmental outcomes for children (Julian & McCall, 2011), presumably because adoptive parents want those children, commit themselves to their permanent care, often have better financial and educational resources, and may take children who are developmentally better and have fewer risks (although one study assessing this possibility did not find that adopted children were developmentally better before adoption than children transitioning to other types of families; McCall et al., 2013).

Foster care (whether nonrelative or kinship) is typically associated with better child outcomes than continued institutionalization (Julian & McCall, 2011), but quality undoubtedly matters. The best and most frequently cited evidence for the benefits of foster care is the Bucharest Early Intervention Project (BEIP) in which children were randomly assigned (the only such study) to high-quality foster care (at 5-31 months, M = 22 months.) versus remaining in the institution. Fostered children displayed better physical and mental development, especially those assigned to foster care at younger ages, than those who remained in institutional care (Nelson et al., 2007; Johnson et al., 2010).

Generally, children reunified with their biological families tend not to do as well developmentally as adopted or fostered children and only slightly better than those remaining in institutions (but long-term institutionalization is poorer; Julian & McCall, 2011). Many countries do not have professional services designed to help at-risk families either keep their children or deal with family circumstances that originally led to the institutionalization of the child.

But the quality of the family and caregiver—child interactions influence children's development regardless of the category of family. This proposition is unquestioned and amply supported empirically within cultures, but it is sometimes overlooked in the surge toward deinstitutionalization. In particular, the differences in outcomes for adoptive, foster, and biological families likely reflect differences in the quality of care among these family types (Julian

& McCall, 2011; Muhamedrahimov et al., 2014). Further, even within a category (e.g., foster families), children in well-trained and supported foster families do better developmentally than in foster families that are not so well supported (Tibu, Humphreys, Fox, Nelson, & Zeanah, 2014).

Implications. Generally, children do better developmentally in family care than in institutions as typically practiced. However, the quality of care matters whether between institutions and families or between and within family types (see below). Birth families will always have priority, but professional services are likely needed to help at-risk birth families keep their children as well as to train and support quality foster parents. Further, adoption is likely the best alternative to biological families, but some countries that provide financial support to foster parents do not give similar support to adoptive parents, even though both fostering and adoption save the state the costs of institutionalization.

Some Important Distinctions and Controversies

Ideal Versus Current Practice

It is important to distinguish two categories of research on institutions and family alternatives. In the first type, care environments are studied as they are currently practiced. This means that the care environments already exist in the community and the care delivered is essentially how it is regularly practiced there, and children are probably selected to be assigned to one or another care environment. Also, it is often unknown whether the environment studied is typical of other examples of this type of care, and it is likely that the worst care environments are not open to assessment and scientific study. Nevertheless, these studies often provide the only empirical picture of the nature of care provided as it is typically prac-

The second type of study creates a care environment that is closer to the *ideal environment* of that type. Such studies tell us what could be accomplished under more ideal conditions, and children may or may not be specially selected to participate. An issue is whether such an ideal

service can be maintained or duplicated at scale in a low-resource location.

Three major studies. This distinction is crucial when considering three of the more well-known, often cited, and sometimes controversial studies in this literature. As noted above, the BEIP randomly assigned children to a highquality, professionally ideal foster care versus institutional care as typically practiced (Smyke et al., 2007; Smyke, Zeanah, Fox, & Nelson, 2009). The study showed that high-quality foster care has the potential of improving children's development relative to the typical institutional environment (Nelson et al., 2007). It is uncertain whether most developing countries could or would implement for most children such an ideal and likely costly foster care system in a reasonable period of time. Indeed children who were transitioned to government foster care gained less developmentally than those who remained in the ideal foster care, although the number of children involved was small (Tibu et al., 2014). Further, no one knows how beneficial the ideal foster care would be if it were compared to an ideal institution.

The second study (Whetten et al., 2009, 2014) found the development of children 6–12 years of age in community-created and operated residential care facilities to be as good or better than children raised in family alternatives in the community. This was a study of care as currently practiced, and the countries, communities, and families were sampled in a way to be representative of these environments. This study demonstrated that not every family is better than any institution, but it says nothing about what those family care environments or the residential care facilities could be if they were financially and professionally supported to improve their quality of care.

Third, the St. Petersburg-U.S.A. Orphanage Research Team (2008) intervention to improve the quality of care in an institution was compared to an institutional environment as currently practiced. Children developed substantially better in the improved institution. This study shows that institutions can be improved with benefits to children. Further, the intervention was implemented with regular caregiving staff in a manner that could be subsequently maintained on the regular government-supplied budget with similar benefits for children, which in fact was accomplished (McCall, Groark,

Fish, Muhamedrahimov, Palmov, & Nikiforova, 2013).

Implications. Collectively, these and other studies suggest that in practice the quality of care may be more important for children's outcomes than the type of care. Family care inherently seems to have many structural features that would support children's development, but the quality of the caregiver–child interactions, family social-economic status, and how the child is treated within a family can make a great deal of difference. Conversely, institutions do not have to operate in the way many currently do; they could be more family like in both structure and caregiver–child interactions, although they cost more than family care (Engle et al., 2011).

Intercountry Adoption

Intercountry adoption increased in frequency during the last decade but is now decreasing rapidly (Selman, 2012), in part because it is highly controversial (Gibbons & Rotabi, 2012).

Benefits and liabilities. Research does demonstrate certain benefits to most intercountry adopted children. These children are placed with predominantly affluent and well-educated families in Western Europe and North America, and the vast majority develop physically and mentally very well and do not have long-term behavioral problems if they have been placed in these families at relatively young ages (van IJzendoorn et al., 2007; van IJzendoorn & Juffer, 2006). Although there are celebrated cases of failed adoptions and some adopted children present serious problems for their parents (Pickert, 2010), the rates of such cases are lower among intercountry adopting families than in domestic step families, for example (van IJzendoorn, Euser, Prinzie, Juffer, & Bakermans-Kranenburg, 2009). In one study, 98% of U.S.A. intercountry adoptive parents reported they were happy with the adoption and would recommend it to their friends (Hellerstedt et al., 2008).

However, unscrupulous institutional directors, administrators, private agencies, and individuals who make money placing children in intercountry adoptive families; individuals who pay women to bear children expressly for adoption; individuals who lie to adoptive parents about a child's background; and "kidnapping"

AQ: 6

children for adoption have all been reported (Gibbons & Rotabi, 2012; Oreskovic & Maskew, 2008). Often, such reports are anecdotal and the prevalence of such circumstances is unknown (Bartholet, 2007), whereas other cases are well documented (Gibbons & Rotabi, 2012; Oreskovic & Maskew, 2008). Such abuses appear to be less common in countries that have national regulations governing intercountry adoptions (Oreskovic & Maskew, 2008), but these regulations are unlikely to prevent all abuses. Also, failed intercountry placements raise concerns in sending countries about being unable to monitor children after placement in another country. The consequence of these circumstances is sometimes a complete termination of intercountry placements, rather than attempting to develop appropriate policies and a system to enforce them consistent with the Hague Convention on Intercountry Adoption (1993; but see Rotabi & Gibbons, 2012). This strategy may stop the unscrupulous and illegal practices, but in the absence of a domestic child welfare system it also denies children the opportunity to live in caring families (Bartholet, 2007). But some advocates fear that any encouragement of intercountry adoptions provides a convenient excuse to policymakers not to develop a comprehensive domestic child welfare system of family alternatives.

Implications. The ideal is for a country to develop a high quality, comprehensive, domestic child welfare system that relies on family alternatives, and this should have a clear priority over intercountry adoptions. If intercountry adoptions are permitted, strong and enforceable national policies need to govern the process consistent with the Hague Convention (1993; Rotabi & Gibbons, 2012).

Improving Institutions

Many advocates argue that they do not want to improve institutions; they want to abolish them. This is a worthy goal, but, as noted above, it is not always easily implemented. Therefore, interim goals may be needed.

Improving institutions. The small literature on intervening in institutions to provide children with better caregiving, more stimulation, and closer relationships with caregivers is fairly uniform in demonstrating that almost any improvement in these regards will produce pro-

portionate advances in children's physical and mental development (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2008). The issue seems less one of whether institutions *could* be improved, but more whether they *should* be improved (Groark & McCall, 2011a, 2011b; McCall, 2013). On the one hand, family advocates argue that improving institutions only encourages the wrong approach, and it may substitute for and siphon resources from building a child welfare system of family care alternatives. Certainly, the preponderance of research favors family care over institutions as typically practiced, but there are exceptions (Whetten et al., 2009, 2014).

On the other hand, the most compelling reason to improve institutions is to provide the best environment possible for *all* vulnerable children. Regardless of a country's best efforts to move toward a professional child welfare system of family alternatives, this can take time and resources and substantial numbers of children are likely to remain in institutions for many years to come, especially children with disabilities.

Implications. Countries should maintain a priority for developing quality family alternatives, but they might also consider improving institutions as long as many children remain there. Improving the institutions should not divert energy or resources from developing family alternatives, but the money ultimately saved by having family alternatives might be used to improve institutions. Further, improving institutions and monitoring their continued quality are imperative if they are used as a temporary transitioning environment, especially for infants and toddlers.

Volunteer Tourism

Some faith-based institutions in low-resource countries encourage volunteers from advantaged nations to visit the institution to care for and play with the children for a week or two, sometimes longer. In addition, some tourist companies are arranging similar stays of volunteers in institutions. Is this a good idea?

Good or bad? Some have argued that having a constantly changing set of caregivers is part of the problem with many institutions, and having volunteers for a week or two simply compounds this condition, increases the fre-

quency with which young children experience the loss of a caregiver, and contributes to instability in the caregiving environment and stress in the children (Richter & Norman, 2010).

There are no research data known to the authors that directly assess the benefits or liabilities of such volunteers. Theoretically, the potential of adding to instability and inconsistency of caregiving is present in some situations, especially for infants and toddlers. Conversely, older children may view such volunteers, not as caregivers, but people who come to play, and they may provide a great deal of stimulation and perhaps more quality interaction with children than the regular caregivers.

Implications. If children, especially infants and toddlers, do not have a few, stable, consistent caregivers but rather many and changing staff caregivers, adding a constantly changing set of volunteers may compound this problem despite the stimulation they may provide the children. However, if groups are small, children are cared for by a few stable caregivers, and children remain with those caregivers over long periods of their early lives, short-term volunteers may not be so detrimental, especially for older children. The latter case resembles a stable family environment with many grandparents, aunts and uncles, neighbors, and friends who visit occasionally. One study found children in the latter kind of environment were more developmentally advanced than children in more typical institutions without volunteers (Groark et al., 2013a).

Creating a Modern Child Welfare System

Most child welfare advocates subscribe to the goal that every child should be reared in a safe, permanent, loving family. Underlying this goal is the assumption that providing very positive caregiver—child interactions is probably more readily accomplished in family environments than in institutions. Further, studies show that creating a system of family alternatives may require a substantial financial investment, but once established it is much cheaper to operate than institutions (Engle et al., 2011).

Helping nations, especially those with minimum resources, to develop comprehensive and professional child welfare systems that emphasize family care is a major agenda item for many international organizations (e.g.,

UNICEF), national organizations interested in promoting human welfare and development (e.g., USAID), and private foundations (e.g., Child Protection Funders Group). This goal is achievable for some countries but challenging for others.

Providing vulnerable children with good quality care in family environments takes more than simply getting children into families, paying people to take children, or having kin raise them. Further, some countries have simply legislated the goal without providing for the process by which it will be accomplished. Specifically, requiring that young children should not be reared in institutions does not necessarily mean that they will be reared in better environments unless policymakers also legislate, develop, and pay for an alternative family system.

There are several requirements for such a system (Engle et al., 2011; Greenberg & Partskhaladze, 2014; Groza, Bunkers, & Gamer, 2011), a few of which are listed below.

1. Whatever care arrangements are developed for a particular locale, they must be created by local practitioners and policymakers to fit local circumstances. Foreign professionals and policymakers are prone to advocate and support solutions that have worked in their own countries, but such an approach may not fit the circumstances of another country. Advisors and international groups might better provide local professionals an array of choices with their pros and cons that local officials and stakeholders can consider within the history, culture, financial resources, and traditions of their locale.

There can be a variety of local challenges, some unique. For example, although kinship care may be traditional in some countries, it may not work well under all circumstances, especially when resources are meager (Leinaweaver, 2014; Whetten et al., 2009, 2014). In such situations, kinship care might work more effectively if financial resources were provided to the families and educational opportunities were made available to the children. In contrast, in China, there are many people willing and able to foster children, but it is more difficult for the state to monitor the care of such children when they are scattered throughout the community. So apartments housing foster families on the grounds of an institution may be an option (Wang et al., 2014). Such foster parents rear four children, have a very nice apartment, can

use the institution's medical and educational services, and have a large, readily available foster parent support group. Thus, whatever system is developed in a locality, it must fit the existing social, cultural, political, and financial circumstances, and this is more likely to be achieved if local professionals play a major role in developing the system.

- 2. Political support for a nation-wide system is essential. Single organizations can create examples and model services to demonstrate that components of a system can be implemented and be effective. But a national government especially if the president and ministers will champion the movement—is needed to obtain domestic and foreign funding, give priority to the goals, create financial incentives for parents, consolidate government's role into one government unit, and pass policies that speed the transition of children to families. As noted above, many countries have practices and policies that either prohibit certain children from being adopted or fostered or that delay the placement of children into families. These need to be reconsidered to produce a better balance between the rights of birth parents and those of the child. But a totally top-down transformation process nevertheless must obtain the enthusiastic collaboration of local officials, institutions and their staffs, service professionals, and the general public for the system to be implemented and effective on the ground. Policies alone are not sufficient; implementation is crucial.
- 3. A professional social work infrastructure may be needed to support the child welfare system. In many low-resource countries, social services for at-risk families and children are not well developed or available at all. But several aspects of a child welfare system need such a professional infrastructure, which may take several years to develop. Universities need to develop a social work curriculum or make an existing theoretical course more practical (Groark et al., 2010). Countries might consider reducing the usual social work curriculum to its practice essentials and offer certificate programs to train a cadre of community workers who might be supervised by more fully trained professionals.
- 4. A variety of services need to be developed. Parents need to be recruited, selected, trained, supported, and monitored, all of which require a professional social work infrastructure. Public

information campaigns to recruit parents are sometimes needed, and the best emphasize the benefits of parenting rather than the undesirable characteristics of institutions as the alternative for these children. The latter strategy may motivate some parents to "save these children," but it stigmatizes all children in the country who have spent some time in an institution and alienates the staff of institutions who could play a major role in the emerging alternative family system (Groark et al., 2010).

Indeed, fostering children may be opposed by certain special interest groups including the institutions themselves and some NGOs, and special efforts may be needed to gain their support. The transition to family alternatives might be best characterized as an evolution, not the revolution that some advocates promote. Instead, institutions might lead the transition by including community workers who track down parents who abandoned their children; arrange financial, personal, and social services to help them keep their children (and most parents want to keep them); select, train, and monitor parents; and offer the institution as a transition facility until a placement can be made and as a child care facility for parents who keep their children and need care to work (Walakira et al., 2014). Institutions may be more supportive if they are made part of the solution, not the problem.

- 5. Special services will be needed for children with special needs. A substantial percentage of vulnerable young children have disabilities, such children are harder to place in adoptive or foster families, and many low-resource countries are unaware of early intervention techniques that can help such children. Ultimately, countries will need to develop professional expertise to serve these children, to help support parents to keep them, and to provide specialized behavioral and mental health services.
- 6. Early attempts at creating family alternatives may not go smoothly, and persistence and continuous system improvement may be needed. In Ukraine, for example, many of the requirements for moving toward family alternatives were present, but after five intensive years 6,700 children were placed in families but 45,000 remained in institutions (Groark et al., 2010). Adjustments were needed in financial supports, professional social work, public information,

financial incentives, and government oversight. Ukraine and other countries (Muhamedrahimov et al., 2014) report high rates of failed fostering in which children are returned to the institution in the early years of developing foster care; again professional supports for foster parents might minimize failed and multiple foster placements.

7. Despite challenges, it is possible to create a comprehensive modern child welfare system of family alternatives in a relatively short period of time. Greenberg and Partskhaladze (2014) describe how the Republic of Georgia accomplished this (see also Johnson et al., 2014). Some crucial factors included the availability of a large amount of money, external political pressure and incentives for change, government support, consolidation of governance under one agency, cooperation among major stakeholders, a comprehensive array of programs, local control, the development of a professional social work infrastructure, and monitoring of services. Ultimately, countries will need to develop professional expertise to serve vulnerable children, help support parents to keep them, and provide specialized behavioral and mental health services.

References

- Ainsworth, M. D. S. (1979). Attachment as related to mother-infant interaction. In J. S. Rosenblatt, R. A. Hinde, C. Beer, & M. Busnel (Eds.), Advances in the study of behavior (pp. 1–51). New York, NY: Academic Press.
- Ainsworth, M. D. S., Bell, S. M., & Stayton, D. J. (1974). Infant mother attachment and social development: Socialization as a product of reciprocal responsiveness to signals. In M. P. M. Richards (Ed.), *The integration of the child into a social world* (pp. 99–135). Cambridge, UK: Cambridge University Press.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum Associates.
- Bakermans-Kranenburg, J., Steele, H., Zeanah, C. H., Muhamedrahimov, R. J., Vorria, P., Dobrova-Krol, N. A., . . . Gunnar, M. R. (2011). Attachment and emotional development in institutional care: Characteristics and catch-up. *Monographs of the Society for Research in Child Development*, 76 (Serial No. 201), 62–91. http://dx.doi.org/10.1111/ j.1540-5834.2011.00628.x

- Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2008). Earlier is better: A meta-analysis of 70 years of interventions improving cognitive development in institutionalized children. Monographs of the Society for Research in Child Development, 73 (Serial No. 291), 279–293. http://dx.doi.org/10.1111/j.1540-5834.2008 .00498.x
- Bartholet, E. (2007). International adoption: Thoughts on the human rights issues. *Buffalo Human Rights Law Review, 13*, 151–203. Retrieved from http://papers.ssm .com/sol3/papers.cfm?abstract_id=1024272
- Blizzard, R. M. (1990). Psychosocial short stature. In F. Lifshitz (Ed.), *Pediatric endocrinology* (pp. 77–91). New York, NY: Marcel Dekker.
- Bos, K., Zeanah, C. H., Fox, N. A., Drury, S. S., McLaughlin, K. A., & Nelson, C. A. (2011). Psychiatric outcomes in young children with a history of institutionalization. *Harvard Review of Psychi*atry, 19, 15–24. http://dx.doi.org/10.3109/ 10673229.2011.549773
- Bowlby, J. (1952). Maternal care and mental health. World Health Organization monograph series no. 2. Geneva, Switzerland: World Health Organization. Retrieved from http://apps.who.int/iris/handle/ 10665/40724
- Bowlby, J. (1958). The nature of the child's tie to his mother. *The International Journal of Psycho-Analysis*, 39, 350–373. Retrieved from http://www.psychology.sunysb.edu/attachment/online/nature%20of%20the%20childs%20tie%20bowlby.pdf
- Bowlby, J. (1969/1997). Attachment and loss: Vol. 1. Attachment (2nd ed.). London, UK: Pimlico.
- Bowlby, J. (1980/1998). Attachment and loss: Vol. 2. Separation. London, UK: Pimlico.
- Carlson, E. A. (1998). A prospective longitudinal study of attachment disorganization/disorientation. *Child Development*, 69, 1107–1128. http://dx.doi.org/10.1111/j.1467-8624.1998.tb06163.x
- Davis, R. (2006). Emerging practices in communitybased services for vulnerable groups: A study of social services delivery systems in Europe and Eurasia. Retrieved from pdf.usaid.gov/pdf_docs/ PNADG301.pdf
- Dennis, W., & Najarian, P. (1957). Infant development under environmental handicap. *Psychological Monographs*, 71 (Whole No. 436). http://dx.doi.org/10.1037/h0093705.
- Dobrova-Krol, N. A., van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Juffer, F. (2010). Effects of perinatal HIV infection and early institutional rearing on physical and cognitive development of children in Ukraine. *Child Development*, 81, 237–251. http://dx.doi.org/10.1111/j.1467-8624.2009.01392.x
- Engle, P., Groza, V., Groark, C. J., Greenberg, A., Bunkers, K. M., & Muhamedrahimov, R. (2011).

- Children without parental care. *Monographs of the Society for Research in Child Development*, 76 (Serial No. 301), 190–222. http://dx.doi.org/10.1111/j.1540–5834.2011.00633.x
- Gavrin, J. B., & Sacks, L. S. (1963). Growth potential of preschool-aged children in institutional care: A positive approach to a negative condition. *Ameri*can Journal of Orthopsychiatry, 33, 399–408. http://dx.doi.org/10.1111/j.1939-0025.1963 .tb00374.x
- Gibbons, J. L., & Rotabi, K. S. (Eds.). (2012). Intercountry adoption: Policies, practices, and outcomes. Surry, UK: Ashgate.
- Greenberg, A. L., & Partskhaladze, N. (2014). How the Republic of Georgia has nearly eliminated the use of institutional care for children. *Infant Mental Health Journal*, 35, 185–191. http://dx.doi.org/ 10.1002/imhj.21434
- Groark, C. J., & McCall, R. B. (2011a). Implementing changes in institutions to improve young children's development. *Infant Mental Health Journal*, 32, 509–525. http://dx.doi.org/10.1002/imhj.20310
- Groark, C. J., & McCall, R. B. (2011b). Improving institutions: Can we? Should we? How? *Interna*tional Journal of Child and Family Welfare, 14, 64–72.
- Groark, C. J., McCall, R. B., Fish, L., McCarthy, S. K., Eichner, J. C., & Gee, A. D. (2013a). Structure, caregiver-child interactions, and children's general physical and behavioral development in three Central American institutions. *International Perspectives in Psychology: Research, Practice*. Consultation, 2, 207–224.
- Groark, C. J., McCall, R. B., & Fish, L.; the Whole Child International Evaluation Team. (2011). Characteristics of environments, caregivers, and children in three Central American orphanages. *Infant Mental Health Journal*, 32, 232–250. http://dx.doi.org/10.1002/imhj.20292
- Groark, C. J., McCall, R. B., & Li, J. (2010). Characterizing the status and progress of a country's child welfare reform. *International Journal of Child and Family Welfare*, 12, 145–160.
- Groark, C. J., McCall, R. B., McCarthy, S. K., Eichner, J. C., Warner, H. A., Salaway, J., . . . Lopez, M. E. (2013b). The effects of a social-emotional intervention on caregivers and children with disabilities in two Central American institutions. *Infants & Young Children*, 26, 286–305. http://dx.doi.org/10.1097/IYC.0b013e3182a682cb
- Groza, V., & Bunkers, K. (2014). Adoption policy and evidence-based domestic adoption practice: A comparison of Romania, Ukraine, India, Guatemala, and Ethiopia. *Infant Mental Health Journal*, 35, 160–171. http://dx.doi.org/10.1002/imhj .21439

- Groza, V. K., Bunkers, K. M., & Gamer, G. N. (2011). Ideal components and current characteristics of alternative care options for children outside parental care in low-resource countries. *Monographs of the Society for Research in Child Development*, 76 (Serial No. 301), 163–189. http://dx.doi.org/10.1111/j.1540–5834.2011.00632.x
- Gunnar, M. (2001). Effects of early deprivation: Findings from orphanage-reared infants and children. In C. A. Nelson & M. Luciana (Eds.), *Hand-book of developmental cognitive neuroscience* (pp. 617–629). Cambridge, MA: MIT Press.
- Hawk, B., & McCall, R. B. (2010). CBCL behavior problems of post-institutionalized international adoptees. Clinical Child and Family Psychology Review, 13, 199–211. http://dx.doi.org/10.1007/ s10567-010-0068-x
- Hawk, B. N., & McCall, R. B. (2011). Specific extreme behaviors of postinstitutionalized Russian adoptees. *Developmental Psychology*, 47, 732–738. http://dx.doi.org/10.1037/a0021108
- Hellerstedt, W. L., Madsen, N. J., Gunnar, M. R., Grotevant, H. D., Lee, R. M., & Johnson, D. E. (2008). The international adoption project: Population-based surveillance of Minnesota parents who adopted children internationally. *Maternal and Child Health Journal*, 12, 162–171. http://dx.doi.org/10.1007/s10995-007-0237-9
- Johnson, D. E. (2000a). Long-term medical issues in international adoptees. *Pediatric Annals*, 29, 234–241. http://dx.doi.org/10.3928/0090-4481-20000401-09
- Johnson, D. E. (2000b). In C. A. Nelson (Ed.), *The effects of early adversity on neurobehavioral development* (Minnesota Symposium on Child Psychology, *31*, 113–162). Mahwah, NJ: Erlbaum.
- Johnson, D. E., Dovbnya, S. V., Morozova, T. U., Richards, M. A., & Bogdanova, J. G. (2014). From institutional care to family support: Development of an effective early intervention network in the Nizhny Novgorod Region, Russian Federation, to support family care for children at risk for institutionalization. *Infant Mental Health Journal*, 35, 172–184. http://dx.doi.org/10.1002/imhj.21433
- Johnson, D. E., & Gunnar, M. R. (2011). Growth failure in institutionalized children. *Monographs* of the Society for Research in Child Development, 76 (Serial No. 301), 92–126. http://dx.doi.org/ 10.1111/j.1540–5834.2011.00629.x
- Johnson, D. E., Guthrie, D., Smyke, A. T., Koga, S. F., Fox, N. A., Zeanah, C. H., & Nelson, C. A., III. (2010). Growth and associations between auxology, caregiving environment, and cognition in socially deprived Romanian children randomized to foster vs ongoing institutional care. Archives of Pediatrics and Adolescent Medicine, 164, 507–516. http://dx.doi.org/10.1001/archpediatrics.2010.56

- Juffer, F., Palacios, J., LeMare, L., Sonuga-Barke, E. J. S., Tieman, W., Bakermans-Kranenburg, M. J., . . . Verhulst, F. C. (2011). Development of adopted children with histories of early adversity. *Monographs of the Society for Research in Child Development*, 76 (Whole No. 301), 31–60. http://dx.doi.org/10.1111/j.1540–5834.2011.00627.x
- Julian, M. M. (2009). Adult outcomes of early institutionalization. Unpublished manuscript, University of Pittsburgh, Pittsburgh, PA.
- Julian, M. M. (2013). Age at adoption from institutional care as a window into the lasting effects of early experiences. *Clinical Child and Family Psychology Review*, 16, 101–145. http://dx.doi.org/10.1007/s10567-013-0130-6
- Julian, M. M., & McCall, R. B. (2011). The development of children within different alternative residential care environments. *International Journal of Child and Family Welfare*, 14, 119–147.
- Kreppner, J. M., Rutter, M., Beckett, C., Castle, J., Colvert, E., Groothues, C., . . . Sonuga-Barke, E. J. S. (2007). Normality and impairment following profound early institutional deprivation: A longitudinal follow-up into early adolescence. *Devel*opmental Psychology, 43, 931–946. http://dx.doi .org/10.1037/0012-1649.43.4.931
- Lee, R. M., Seol, K. O., Sung, M., Miller, M. J., & the Minnesota International Adoption Project Team. (2010). The behavioral development of Korean children in institutional care and international adoptive families. *Developmental Psychology*, 46, 468–478. http://dx.doi.org/10.1037/a0017358
- Leinaweaver, J. (2014). Informal kinship-based fostering around the world: Anthropological findings. *Child Development Perspectives*, 8, 131–136.
- McCall, R. B. (2011). Research, practice, and policy perspectives on issues of children without permanent parental care. *Monographs of the Society for Research in Child Development, 76* (Serial No. 301), 223–272. http://dx.doi.org/10.1111/j.1540–5834.2011.00634.x
- McCall, R. B. (2013). The consequences of early institutionalization: Can institutions be improved? should they? *Child and Adolescent Mental Health*, 18, 193–201.
- McCall, R. B., Groark, C. J., Fish, L., Muhamedrahimov, R. J., Palmov, O. I., & Nikiforova, N. V. (2013). Maintaining a social-emotional intervention and its benefits for institutionalized children. *Child Development*, 84, 1734–1749. http://dx.doi .org/10.1111/cdev.12098
- McCall, R. B., Groark, C. J., & Rygaard, N. P. (2014). Global research, practice, and policy issues in the care of infants and young children at risk [Special Issue]. *Infant Mental Health Journal*, *35*, 87–93. http://dx.doi.org/10.1002/imhj.21441
- McCall, R. B., van IJzendoorn, M. H., Juffer, F., Groark, C. J., & Groza, V. K. (Eds.). (2011).

- Children without permanent parents: Research, practice, and policy. *Monographs of the Society for Research in Child Development*, 76 (Serial No. 301), 1–280. http://dx.doi.org/10.1111/j.1540-5834.2011.00634.x10.1111/j.1540-5834.2011.00640.x
- Merz, E. C., & McCall, R. B. (2011). Parent ratings of executive functioning in children adopted from psychosocially depriving institutions. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 52, 537–546. http://dx.doi.org/10.1111/j .1469-7610.2010.02335.x
- Muhamedrahimov, R. J., Agarkova, V. A., Vershinia, E. A., Palmov, O. I., Nikiforova, N. V., McCall, R. B., & Groark, C. J. (2014). Behavior problems in children transferred from a socioemotionally depriving institution to St. Petersburg (Russian Federation) families. *Infant Mental Health Jour*nal, 35, 111–122. http://dx.doi.org/10.1002/imhj .21435
- Nelson, C. A., III, Zeanah, C. H., Fox, N. A., Marshall, P. J., Smyke, A. T., & Guthrie, D. (2007). Cognitive recovery in socially deprived young children: The Bucharest Early Intervention Project. *Science*, 318, 1937–1940. http://dx.doi.org/10.1126/science.1143921
- Oreskovic, J., & Maskew, T. (2008). Red thread or slender reed: Deconstructing Professor Bartholet's mythology of international adoption. *Buffalo Hu*man Rights Law Review, 14, 71–128.
- Pickert, K. (2010). When the adopted can't adapt. *Time*, *175*(25), 34–39.
- Richter, L. M., & Norman, A. (2010). AIDS orphan tourism: A threat to young children in residential care. *Vulnerable Children and Youth Studies*, 5, 217–229. http://dx.doi.org/10.1080/17450128 .2010.487124
- Rotabi, K. S., & Gibbons, J. L. (2012). Does the Hague Convention on International Adoption adequately protect orphaned and vulnerable children and their families? *Journal of Child and Family Studies*, 21, 106–119. http://dx.doi.org/10.1007/s10826-011-9508-6
- Rosas, J. M., & McCall, R. B. (2011). Characteristics of institutions, interventions, and resident children's development. Unpublished manuscript, University of Pittsburgh, Pittsburgh, PA.
- Rutter, M., Beckett, C., Castle, J., Colvert, E., Kreppner, J., Mehta, M., . . . Sonuga-Barke, E. J. S. (2007). Effects of profound early institutional deprivation: An overview of findings from a UK longitudinal study of Romanian adoptees. European Journal of Developmental Psychology, 4, 332–350. http://dx.doi.org/ 10.1080/17405620701401846
- Rutter, M., Sonuga-Barke, E. J. S., Beckett, C., Castle, J., Kreppner, J., Kumsta, R., . . . Bell, C. A. (2010). Deprivation-specific psychological pat-

terns: Effects of institutional deprivation. *Monographs of the Society for Research in Child Development*, 75 (Serial No. 295), 1–229. http://dx.doi.org/10.1111/j.1540-5834.2010.00550.x

- Save the Children. (2009). *Institutional care: The last resort (Policy Brief)*. Retrieved from http://resourcecentre.savethechildren.se/library/institutional-care-last-resort-policy-brief
- Selman, P. (2012). The rise and fall of intercountry adoption in the 21st century: Global trends from 2001 to 2010. In J. L. Gibbons & K. S. Robati (Eds.), *Intercountry adoption:Policies, practices,* and outcomes (pp. 7–27). Surrey, UK: Ashgate.
- Skeels, H. M., & Dye, H. A. (1939). A study of the effects of differential stimulation in mentally retarded children. *Proceedings of the American As*sociation of Mental Deficiency, 44, 114–136.
- Smyke, A. T., Koga, S. F. M., Johnson, D. E., Fox, N. A., Marshall, P. J., Nelson, C. A., . . . the BEIP Core Group. (2007). The caregiving context in institution-reared and family-reared infants and toddlers in Romania. *Journal of Child Psychology* and Psychiatry, 48, 210–218. http://dx.doi.org/ 10.1111/j.1469-7610.2006.01694.x
- Smyke, A. T., Zeanah, C. H., Jr., Fox, N. A., & Nelson, C. A., III. (2009). A new model of foster care for young children: The Bucharest early intervention project. *Child and Adolescent Psychiat*ric Clinics of North America, 18, 721–734. http:// dx.doi.org/10.1016/j.chc.2009.03.003
- SOS Children's Villages International. (2014). *Children's villages*. Retrieved from http://www.soschildrensvillages.org/
- Sparling, J., Dragomir, C., Ramey, S. L., & Florescu, L. (2005). An educational intervention improves developmental progress of young children in a Romanian orphanage. *Infant Mental Health Journal*, 26, 127–142. http://dx.doi.org/10.1002/imhj .20040
- Spitz, R. A. (1946). Anaclitic depression; an inquiry into the genesis of psychiatric conditions in early childhood. *The Psychoanalytic Study of the Child*, 2, 313–342.
- St. Petersburg-USA Orphanage Research Team. (2005). Characteristics of children, caregivers, and orphanages for young children in St. Petersburg, Russian Federation [Special Issue on Child Abandonment]. *Journal of Applied Developmental Psychology*, 26, 477–506. http://dx.doi.org/10.1016/j.appdev.2005.06.002
- St. Petersburg-USA Orphanage Research Team. (2008). The effects of early social-emotional and relationship experience on the development of young orphanage children. *Monographs of the Society for Research in Child Development, 73* (Serial Number 291), 1–260. http://dx.doi.org/10.1002/9781444309683.fmatter

- The Hague Convention on Protection of Children and Co-Operation in Respect of Intercountry Adoption. (1993). *Retrieved from* www.hcch.net/index_en.php?act=conventions.pdf&cid=69
- The Way Forward Project. (2013). *The Way Forward Project*. Retrieved from http://www.thewayforwardproject.org/about/
- Tibu, F., Humphreys, K. L., Fox, N., Nelson, C., & Zeanah, C. H., Jr. (2014). Psychotherapy in young children in two types of foster care following institutional rearing. *Infant Mental Health Journal*, 35, 123–131. http://dx.doi.org/10.1002/imhj.21428
- Tizard, B., & Rees, J. (1974). A comparison of the effects of adoption, restoration to the natural mother, and continued institutionalization on the cognitive development of four-year-old children. *Child Development*, 45, 92–99. http://dx.doi.org/ 10.2307/1127754
- United Nations. (1989). Convention on the rights of the child. Retrieved from http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx
- United Nations. (2010). *Guidelines for the alternative care of children*. Retrieved from http://www.crin.org/BCN/initiatives.asp
- USAID. (2009). U.S. government and partners: Working together on a comprehensive coordinated and effective response to highly vulnerable children. Washington, DC: USAID. Retrieved from pdf.usaid.gov/pdf_docs/PDACN600.pdf
- USAIDS, UNICEF, and USAID. (2004). Children on the brink 2004: A joint report of new orphan estimates and a framework for action. Retrieved from www.unicef.org/publications/cob_layout6-013.pdf
- U.S. Government. (2011). Evidence summit on protecting children outside of family care. Retrieved from http://www.hvc_assistance.org/summit.cfm
- U.S. Government. (2012). U.S. government action plan on children in adversity. Washington, DC:
 U. S. Government. Retrieved from http://transition.usaid.gov/our_work/global_health/pdf/apca.pdf
- van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Juffer, F. (2007). Plasticity of growth in height, weight, and head circumference: Meta-analytic evidence of massive catch-up after international adoption. *Journal of Developmental and Behavioral Pediatrics*, 28, 334–343. http://dx.doi.org/10.1097/DBP.0b013e31811320aa
- van IJzendoorn, M. H., Euser, E. M., Prinzie, P., Juffer, F., & Bakermans-Kranenburg, M. J. (2009). Elevated risk of child maltreatment in families with stepparents but not with adoptive parents. *Child Maltreatment*, *14*, 369–375. http://dx.doi.org/10.1177/1077559509342125
- van IJzendoorn, M. H., & Juffer, F. (2006). The Emanuel Miller Memorial Lecture 2006: Adoption as intervention. Meta-analytic evidence for mas-

- sive catch-up and plasticity in physical, socioemotional, and cognitive development. *Journal of Child Psychology and Psychiatry*, 47, 1228–1245. http://dx.doi.org/10.1111/j.1469-7610.2006.01675.x
- van IJzendoorn, M. H., Juffer, F., & Poelhuis, C. W. K. (2005). Adoption and cognitive development: A meta-analytic comparison of adopted and non-adopted children's IQ and school performance. *Psychological Bulletin*, *131*, 301–316. http://dx.doi.org/10.1037/0033-2909.131.2.301
- van IJzendoorn, M. H., Luijk, M. P. C. M., & Juffer, F. (2008). IQ of children growing up in children's homes: A meta-analysis on IQ delays in orphanages. *Merrill-Palmer Quarterly*, *54*, 341–366. http://dx.doi.org/10.1353/mpq.0.0002
- van IJzendoorn, M. H., Palacios, J., Sonuga-Barke, E. J. S., Gunnar, M. R., Vorria, P., McCall, R. B., . . . Juffer, F. (2011). Children in institutional care: Delayed development and resilience. *Monographs of the Society for Research in Child Development*, 76 (Whole No. 301), 8–30. http://dx.doi.org/10.1111/j.1540–5834.2011.00626.x
- Vorria, P., Papaligoura, Z., Dunn, J., van IJzendoorn, M. H., Steele, H., Kontopoulou, A., & Sarafidou, Y. (2003). Early experiences and attachment relationships of Greek infants raised in residential group care. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 44*, 1208–1220. http://dx.doi.org/10.1111/1469-7610.00202
- Walakira, E. J., Ochen, E. A., Bukuluki, P. W., & Alllan, S. (2014). Residential care for abandoned children and their integration into family based settings in Uganda: Lessons for policy and programming. *Infant Mental Health Journal*, 35, 144–150. http://dx.doi.org/10.1002/imhj.21432
- Wang, W. C., McCall, R. B., Li, J., Groark, C. J., Zeng, F., & Hu, X. (2014). Chinese collective foster care model: Description and evaluation. Unpublished manuscript, University of Pittsburgh, Pittsburgh, PA.
- Whetten, K., Ostermann, J., Pence, B. W., Whetten, R. A., Messer, L. C., Ariely, S., & the Positive Outcomes for Orphans (POFO) Research Team. (2014). Three-year change in the wellbeing of or-

- phaned and separated children in institutional and family-based care settings in five low- and middle-income countries *PLoS ONE*, *9*, e104872. http://dx.doi.org/10.1371/journal.pone.0104872
- Whetten, K., Ostermann, J., Whetten, R. A., Pence, B. W., O'Donnell, K., Messer, L. C., . . . the Positive Outcomes for Orphans (POFO) Research Team. (2009). A comparison of the wellbeing of orphans and abandoned children ages 6–12 in institutional and community-based care settings in 5 less wealthy nations. *PLoS ONE*, 4, e8169. http://dx.doi.org/10.1371/journal.pone.0008169
- Williamson, J., & Greenberg, A. (2010). Families, not orphanages (A Better Care Working Paper). Retrieved from http://bettercarenetwork.org/BCN/details.asp?id=23328&themeID=1003&topicID=1023
- Windsor, J., Benigno, J. P., Wing, C. A., Carroll, P. J., Koga, S. F., Nelson, C. A., III, . . . Zeanah, C. H. (2011). Effect of foster care on young children's language learning. *Child Development*, 82, 1040–1046. http://dx.doi.org/10.1111/j.1467-8624.2011.01604.x
- Wolff, P. H., & Fesseha, G. (1998). The orphans of Eritrea: Are orphanages part of the problem or part of the solution? *The American Journal of Psychiatry*, *155*, 1319–1324. http://dx.doi.org/10.1176/ajp.155.10.1319
- Wright, A. C., Lamsal, D., Ksetree, M., Sharma, A., & Jaffe, K. (2014). From maid to mother: Transforming facilities, staff training, and caregiver dignity in an institutional facility for young children in Nepal. *Infant Mental Health Journal*, *35*, 132–143. http://dx.doi.org/10.1002/imhj.21429
- Zeanah, C. H., Gunnar, M. R., McCall, R. B., Kreppner, J. M., & Fox, N. A. (2011). Sensitive periods. *Monographs of the Society for Research in Child Development*, 76 (Whole No. 301), 147–162. http://dx.doi.org/10.1111/j.1540–5834.2011.00631.x

Received January 16, 2014
Revision received January 16, 2015
Accepted January 22, 2015

AUTHOR QUERIES

AUTHOR PLEASE ANSWER ALL QUERIES

- AQau—Please confirm the given-names and surnames are identified properly by the colors.
 - = Given-Name, = Surname

The colors are for proofing purposes only. The colors will not appear online or in print.

- AQ1—Author: Please be sure to provide the name of the department(s) with which you and your coauthors are affiliated at your respective institutes if you have not already done so. If you are affiliated with a governmental department, business, hospital, clinic, VA center, or other nonuniversity-based institute, please provide the city and U.S. state (or the city, province, and country) in which the institute is based. Departments should be listed in the author footnote only, not the byline. If you or your coauthors have changed affiliations since the article was written, please include a separate note indicating the new department/affiliation: [author's name] is now at [affiliation].
- AQ2—Author: Please note that the year for reference "Spitz 1945" has been changed to "1946" as per the reference list, please check whether the changes made is correct.
- AQ3—Author: Please insert another level 3 heading under level 2 heading (**The Number of Children Outside of Family Care and the Extent of Their Adverse Circumstances are Difficult to Accurately Determine**) or remove the only one level 3 heading under level 2 heading, as appropriate, per journal style ("When there is only one Level (L) 3 heading in section under Level 2 heading, author should be queried to remove or add a second one. Similarly, this applies to a case when there is only one L2 heading under L1 heading"). Please check other instances also.
- AQ4—Author: Ainsworth, Bell, & Stayton, 1974 is not included in the references. Please add to the reference list or delete this citation.
- AQ5—Author: Pickert, 2010 is not included in the references. Please add to the reference list or delete this citation.
- AQ6—Author: Bartholet, 2006 is not included in the references. Please add to the reference list or delete this citation.
- AQ7—Author: Please provide the page range for reference "McCall et al., 2011; Rutter et al., 2010;

1

AUTHOR QUERIES

AUTHOR PLEASE ANSWER ALL QUERIES

St. Petersburg-USA Orphanage Research Team (2008)".

2